

JAMECO[®]

ELECTRONICS

Summer 2003

Volume 632

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**Universal Converter
& Power Adapter****Triple Lighter Outlet
& Battery Analyzer**

Road Warriors: Plug It All In & Check Your Battery Too!

Universal Converter – Don't get caught a plug short, or without the right converter again. Our Universal DC-to-DC Power Converter can convert power from your cigarette lighter to any of the following outputs: 1.5, 3, 4.5, 6, 7.5, and 9 volts. You can power up almost any device with the included adapters. Even reverse the polarity if needed. Optional installation brackets included.

Triple Outlet Battery Checker – Our universal triple lighter outlet multiplies your outlets and checks your car battery too! The green, yellow and red LEDs make it easy for you to identify the power left on your battery. Installation brackets included.

- # 218819EC Universal Converter & Power Adapter \$14.49
- # 219344EC Triple Lighter Outlet & Battery Checker \$12.99
- # 218801EC Single 10' Straight Lighter Extension Cord \$6.49

In Color & Waterproof – Just the Best Pocket GPS

Quite simply, the Magellan Meridian is the ultimate handheld GPS navigator. In your car, skipping across the water in your boat, strolling in the city, or hiking on the trail, this waterproof wonder with full-color 160x120 pixel backlit display and 3-meter accuracy will make your exact location jump off the screen.

The built-in mapping database features 16MB of cities, highways, landmarks, airports, and waterways in North America. Now, you can go exactly where you want to go with unparalleled ease. Its extra large and bright screen displays your exact location and surroundings, including roads, interstates, parks and other points of interest.

An integrated compass, speedometer and extensive text readouts show you everything you need to know to make your trips safer, easier and a lot more fun.

For only \$149.95, you'll receive both an extra 32MB of memory (16MB more than most of our competitors) and the MapSend software package that gives you incredibly detailed, street-level mapping capability. In fact, when you get your Meridian receiver, the only thing you won't be able to find is a better deal. Buy yours today.

**Software & 32MB
Memory Card**

- # 219491EC Magellan Meridian and Software GPS \$499.95
- # 219571EC GPS MapSend Software & 32MB Memory \$149.95

Strike Back Against Road Risks

Every family vehicle needs one of these in easy reach. Don't get trapped inside a damaged vehicle with no way out.

**4-in-1 Emergency Tool**

This unique tool, endorsed by leading safety organizations, offers essential four-way protection in the event of accidents and road emergencies. The hardened sledgehammer tip easily breaks through tempered glass windows to create an escape route. The recessed, surgically sharp safety blade will free you from a jammed seat belt quickly and easily. Plus, its bright red LED flasher and emergency flashlight are built-in to help flag-down rescue teams. Our included mounting bracket ensures instant access, making this a must-have addition for travel safety.

- # 219281EC 4-in-1 Emergency Hammer \$14.99



Fresh Air in the Worst Traffic

If you think the air is bad outside during your commute, it could be even worse inside your car. With the windows rolled up, your in-car environment may be concentrating the pollutants. Chances are, you and your car need a healthy shot of pure, fresh ionized air.

Simply plug this compact, self-contained device into your cigarette lighter and it goes to work immediately, removing dust, cigarette smoke, odors and even airborne bacteria to create a clearer, healthier indoor atmosphere. Order one today, and see how billions of negative ions can have a positive effect on you and your health.

- # 219352EC Auto Air Purifier & Ionizer \$19.95

Hot No-Touch Thermometer Technology at a Very Cool Price

Take exact temperature readings with this tiny beauty in tight, unreachable or hazardous locations, from a safe distance and without the need for contact with the target. Just point the integrated laser pointer at the spot you want to measure and get a precise read-out on the large, digital display.

The data hold / max hold allows easy recording and comparison measurements, and a wide temperature range (-58°F to +518°F) gives you maximum flexibility. At 2.7 ounces you can carry it anywhere. Flip a switch to shift from °F to °C for different applications. The 6:1 field of view can pinpoint hot spots easily. Works with two AAA batteries (included).

- # 219361EC \$59.99

**Actual
Size**



Looks Like a Lightbulb. Works Like a Camera. Screw It In and See!

The bulb looks like a standard fixture, but it really contains a miniature camera and transmitting encoder in a sturdy, weatherproof enclosure. Simply screw the bulb-camera into any outdoor light socket, plug the mini-receiving decoder into any TV in your house, and you are ready to watch the piece-of-mind channel. Installation truly couldn't be easier.

You'll get a clear birds-eye view of your security perimeter without fishing wires through walls, drilling holes, mounting antennas, or changing and checking batteries. While your other outdoor lights illuminate the scene, the SecureView outdoor camera provides the picture. You'll be glad you have it.

219379EC SecureView Outdoor Camera and Decoder \$199.99



Daytime

Nighttime

Hang it, or use the enclosed post!

Get Your Address Noticed Without Wiring Hassles!

Your friends, the pizza delivery guy, and if the need ever arises, emergency services won't miss your house again because you forgot to turn on the light. Our fully customizable, illuminated sign announces your address with clarity and class, day and night. Its sealed solar panel and rechargeable power cells mean you won't have to worry about running wires, changing batteries, or wasting electricity. On at sundown, off at dawn, this sign is a fully automatic, weatherproof and theft resistant way to make sure your house is found. Hang it on your home, or use the enclosed post. Works like a charm.

219272EC Solar-Powered House Light \$49.95

Mini Cooler/Warmer Works In Your Car, Office, or Almost Anywhere!



Lighter or Standard Plug!

Don't bother with the nasty office fridge. Keep a six-pack, your lunch, a snack, or anything at hand; and at optimal refreshment temperature. Our handy, stylish and convenient mini-fridge and warmer is high-tech and CFC-free. Cools 20-25°F from the ambient temperature or keeps food warm at up to a max of 154°F. Operating on either house current or power from your vehicle's lighter socket, the fridge handles a big 4-liter capacity to keep an ample supply of provisions fresh and ready to serve. Auto-shutoff and restart prevents problems.

219310EC Mini Cooler & Warmer \$79.99

Writes Anywhere, Even Underwater!

Durable and lightweight, our Fisher Space Pens are on all NASA space flights. They perform in any condition - upside down, at any angle, in extreme temperatures, on carbonless paper, or even underwater! The secret is its unique design of a sealed-pressurized ink cartridge. Fisher vows an estimated 100 year shelf life.

The Apollo XI Coin and Etched Pen Set commemorates our first manned lunar landing - a Fisher Space Pen was there. The Triple Action Pen allows your choice of black or red ink, or a PDA stylus all in one.

Use your own pen to write anywhere using Fisher Space Pen Refills. Mont Blanc and Cross pens use the specific refills listed. Roller balls by Parker, Waterman, Pelikan, Lamy, Rotring, and Sheaffer use Fisher Space Pen Refills with the included adapters.



# 219395EC	Chrome Shuttle Pen	\$24.99
# 219408EC	Triple Action Pen	\$34.99
# 219387EC	Apollo 11 Pen & Commemorative Coin	\$69.99
# 219483EC	Mont Blanc Medium Black Refill	\$4.99
# 219475EC	Mont Blanc Medium Blue Refill	\$4.99
# 219467EC	Cross Medium Black Refill	\$3.99
# 219459EC	Cross Medium Blue Refill	\$3.99
# 219441EC	Fisher Space Pen Medium Black Refill	\$4.99
# 219416EC	Fisher Space Pen Medium Blue Refill	\$4.99
# 219424EC	Fisher Space Pen Medium Red Refill	\$4.99
# 219432EC	Fisher Space Pen Medium Green Refill	\$4.99



The unit is the carrying case, plus it keeps the accessories organized & ready to go!

3M's Haz-Mat Vac With Hepa Filter Snags Allergens To 0.3 Microns!

Now you too can avoid inhaling tiny airborne toner particles and allergens that almost all vacuums blow right out their exhaust. Originally designed for clean-up of hazardous material, this powerful 1HP/5A vacuum with a fully enclosed disposable HEPA filter provides 99.97% efficiency at 0.3 microns.

This portable vac sets up quickly, and the detachable power cord, stretch hose, crevice brush and nozzle, curved wand nozzle, and 10 ft. HEPA super stretch hose fit conveniently in the case. The motor has factory sealed ball bearings to ensure longlife, while standing up to even the most demanding jobs.

219555EC 3M Professional Haz-Mat Vac With Hepa Filter **\$249.95**
219563EC Replacement Hepa Filter **\$21.95**

Blow Those Crumbs Away!

Keeping your costly electronic equipment debris-free can be the difference between enjoying your valuable freetime or repairing broken equipment. The DataVac Pro Computer Cleaning System is to machine grit, dust, and dirt what Godzilla is to scale models of Tokyo.



Now you can use the same cleaning system that computer and copy-machine techs use nationwide. Its high power and 4-piece Micro Cleaning Tool Kit gets into all the nooks and crannies of your keyboard, computers, fax machines, printers, and scanners to bring them back to clean-room condition. Plus, its custom carrying case makes it easy to ensure high level performance of every thing you own.

219256EC Data Vac Pro Computer Cleaning System **\$68.95**
219264EC Disposable Bags **\$4.99**

Whip Inflation Now!



Avoid the light-headed sensation you get when blowing up a large air-filled item. If you've ever inflated a guest bed, kiddie-pool, raft or other large item the old-fashioned way, MagicAir is ready to come to your respiratory rescue. Powered by any nearby 12-volt source, this portable unit

supplies plenty of air pressure for demanding inflating jobs. Indoors or out, the MagicAir is ideal for boaters, campers, or anyone who wants to give their lungs a well-deserved vacation from inflation.

219205EC MagicAir Electric Inflator/Deflator **\$49.95**

Adjustable or Fixed Lamps Illuminate & Magnify 3X

Need a flexible magnifying solution at a terrific price? Our adjustable rectangular 3-diopter 7.0"x 4.5" diameter lens allows the magnifier independent movement from the light for best viewing angles. Two on-off buttons allow variable lighting.



217517EC



217509EC

Save \$10 by choosing the fixed magnifier light which has the same features, with only one on-off switch and a 7.0" x 5.5" diameter 3-diopter lens for a wider viewing area.

Both lamps provide superior illumination of the subject

with three bright 9-watt compact fluorescent bulbs located to the side and top of the lens. The enclosed spring-balance arms reduce the chance of pinched fingers from springs, providing a sleek clean look too. Arms can be adjusted and secured in any position. Arms extend to 47". UL listed.

217509EC 3X Magnifying Lamp **\$69.95**
217517EC Adjustable Magnifying Lamp **\$79.95**



Precise Control Without Eyestrain

Get precise control of the tiniest parts, without fatigue, with our stainless steel tweezer magnifier instrument. This little gem has a 28.5mm 8X magnifier that swivels up or down for best focus to magnify your subject. The tweezer gives you surgeon's control and the power to literally micro-manage your fine work with confidence.

217824EC Tweezer with Magnifying Lens **\$5.95**

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Clear your desk from multiple business machines and enhance your productivity at an extra low special purchase price of just \$179.95. That's \$85 off HP's suggested retail!

Get crisp, professional looking color or B&W output at 600x600dpi on your paper format of choice: letter, legal, executive, #10 envelope, card stock, or transparency film.

Save money and share a phone line with your answering system. Zip through faxing chores with a fast 6 second a page transmission speed, a huge 150 page memory, and up to 100 speed dials. Reduce or enlarge copies from 50%-200%, and print up to 99 copies at a time.

The sheet-fed color scanner saves you time with your choice of superior 24-bit color, or 8-bit B&W options, with up to an incredibly sharp 1200dpi enhancement. Connect through the computer's parallel port.

Unlike those expensive, space-hogging stand-alone devices, the included software and drivers ensure this single, small-footprint solution is integrated perfectly with your Microsoft® Windows software applications. 17"W X 14.2"D X 10.2"H. Order today while they are still in stock at this special price!

# 211043EC	HP Officejet 600 Series	\$179.95
# 182967EC	HP51629A black cartridge	\$35.95
# 182975EC	HP51649A color cartridge	\$36.95

Solar-Powered Audio Alternative That Pays for Itself

Designed for comfort and everyday activities, this ultra-light dual headband headset provides hours of continuous music. Plus it practically pays for itself by saving you years of battery replacement costs. This compact headset uses paper-thin solar charging film that is both light and flexible.

The Soltronix headphone recharges itself automatically in the sunlight, even while in use. Fully charged within 6 hours, this unit provides over 20 hours of continuous play. The internal antenna and extended base provides superior sound.



# 218624EC	Solar Headset Gray	\$39.89
# 218632EC	Solar Headset Blue	\$39.89



Wireless Solar Weather Station Makes You a Pro

Doppler radar and satellite images are fine for a 10,000 foot view; but if you want to know what Mother Nature has in store for you right now, our complete, self-contained MK III Professional Weather Station provides all the answers.

The solar-powered outdoor sensor unit and yard-mounted rain gauge wirelessly transmit a wealth of meteorological data up to 400 feet away. Data is received by your all-in-one indoor Oracle Display that you can place on a wall or on your desk almost anywhere in your home or office. Humidity, barometric pressure, and rainfall are shown on the left. Wind speed and direction are displayed in the compass rose in the center, and all other sensor data is shown in the upper right. In addition to the real-time data, the Weather Oracle records min/max values, with time of occurrence, for wind speed, temperature, relative humidity, dew point, and barometric pressure. Two independent counters record rainfall. Each rainfall counter shows the time and date of the last counter reset.

Rugged and effortless to install, the included PC interface allows weather tracking and forecasting like a seasoned pro. You simply won't find a better weather station.

The MK III Measures:

- Wind Speed & Direction
- Inside & Outside Temperature
- Barometric Pressure
- Rainfall
- Relative Humidity

You also get:

- Wind Chill
- Dew Point
- Temperature/Heat Index
- Clock and Calendar
- Min's and Max's

# 219643EC	Professional's Home Weather Station	\$1,095.00
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Stay Tuned In and Prepared For Anything, Even without Batteries!

In any emergency, a radio can be your lifeline to the outside world. Ours is quite possibly the most versatile and useful emergency radio ever designed with 11-band coverage, including AM, FM, TV sound, weather band, and a full array of shortwave reception; all available in any situation. Oh, and it sounds great even without an emergency!



Lifetime rechargeable batteries can keep the radio powered in four ways: 1) a built-in solar cell, 2) your car's cigarette lighter, 3) an AC wall adapter, and when all else fails, 4) a hand-operated internal dynamo. Just a one-minute crank of the dynamo provides a full 15 minutes of full-volume radio function. Makes your home and office a safer and more prepared place today.

# 219299EC	Info-Mate World Band Dynamo & Solar Radio ...	\$69.99
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Now Including Exciting Products For Your Personal Use

Over the last few months our buyers have been inundated with products that we know you'd like for your home use. So to make our catalog even handier, we've selected the most popular power supplies, connectors, ICs, tools, test equipment and computer products; and added some of these new products for your home. Take a look at our new products. You'll be glad you did.

Handy notes in this catalog, like the one below, will tell you when there are more products available on our website.

26 More @ www.Jameco.com/PS

Jameco's Name Brand Power Products are always 99% In-Stock and at Lower prices.



You'll find much more at www.Jameco.com !

Our Low Price Guarantee Doesn't Get Much Use...

... And we like it that way. We take our Low Price Guarantee seriously, so we search around the world to identify the sources for the lowest prices for our high-quality products. In fact, we have a team of people dedicated to keeping up to date with our competition and their prices.

Jameco's Low-Price Guarantee

We'll match the advertised price of any like product. It's that simple!

The Jameco Advantage...

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We'll match the advertised price of any like product. It's that simple.

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What Our Customers Say...

"I recently discovered Jameco after dealing with Digi-Key for years. Your website is MUCH more useful. I love that you include pictures of each part."

Duncan

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Take advantage of our "Just in Time" fast delivery. Only Jameco has stocking levels that guarantee 99% in-stock availability! Call any weekday before 6:00 PM EST, and you can be assured you'll have it the next morning.

Don't get Frustrated... Find it at Jameco!

Come to Jameco for popular electronic components, computer products and test equipment at unbeatable prices... You can also find those elusive and frustratingly hard-to-find items, and even some out-of-production parts, too! Join the multitudes of happy Jameco customers... You'll be glad you did.

As Your Needs Change, Jameco Changes With You

We're constantly updating our selection and making great deals based on feedback from our customers. In this catalog you'll find expanded lines of Solar Products, Batteries, Test Equipment, and Computer Products too.

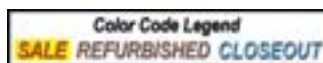
On our new product pages we have added electronic products perfect for your security and personal safety along with essential tools necessary for your every day lifestyle.

Let us know what products you'd like to see, and you'll probably see them soon!



The Color Code Legend...

For easy reference we have included this color code legend on every page.



Different Types of Opportunities

Our sale products are highlighted in **yellow** which usually signifies 10% to 60% off! **SALE**

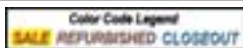
Part No.	Product No.	Pins	Description	1 10
44222	1400	14	Quad 2-input NAND gate	\$49.20
42638	1400	14	Quad 2-input NOR gate	\$9.14
44231	1404	14	Hex inverter (C2400S)	\$9.30

A **brown** part number identifies refurbished / out-of-production products that Jameco delivers to you at terrific prices.

A **blue** part number indicates products that are being phased out due to lack of supply. You probably have one last chance to buy at a reduced price.

Part No.	Product No.
25101	MC146818

Part No.	Product No.
155643	DC603F1



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PRICES

Prices are effective 4-14-03.

Prices and discounts are subject to change without notice.

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If they can't take a hint just visit our website at





www.Jameco.com/CatReferral.

We'd be happy to send them a catalog too!



Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

 TO-3 package 4-pin	 TO-92 package 3-pin	 TO-220 package 3 or 5-pin	 DIP package 8, 14, 16 and 18-pin
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Linear Series

152 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pkg.	Description	1	10	100
120723EC	LM12CLK	TO-3/4	80W op amp.	\$29.95	\$27.95	\$25.95
107094EC	LM34CZ	TO-92	Prec. F temp. sensor (-40°F to +230°F)	5.49	4.49	4.39
107107EC	LM35CZ	TO-92	Prec. C temp. sensor (-40°C to 110°C)	5.95	5.39	4.95
33195EC	TL072CP*	DIP-8	Low noise JFET dual op amp. ....	.39	.35	.29
33216EC	TL074CN*	DIP-14	Low noise JFET quad op amp. ....	.53	.39	.35
33267EC	TL084CN*	DIP-14	JFET-ipt quad op amp. ....	.49	.44	.39
23392EC	LM301N*	DIP-14	Improved op amp. ....	.39	.35	.29
23464EC	LM308N*	DIP-8	Precision op amp.	4.49	3.39	2.39
23528EC	LM311N*	DIP-8	Voltage comparator ....	.35	.25	.19
23608EC	LM318N	DIP-8	Precision hi-speed op amp. ....	.55	.52	.45
23632EC	LM319N	DIP-14	Hi-speed dual comparator ....	.45	.40	.31
23683EC	LM324N**	DIP-14	Low power quad op amp. (ULN4336) ....	.29	.25	.22
23721EC	LM331N	DIP-8	Prec. volt to freq. converter (150ppm/°C) .	2.95	2.25	1.55
23851EC	LM339N**	DIP-14	Quad comparator ....	.29	.25	.22
23966EC	LM358N*	DIP-8	Low power dual op amp. ....	.18	.13	.11
24088EC	LM383T	TO-220/5	7-watt audio high power amp.	5.95	5.39	4.95
24281EC	LM393N*	DIP-8	Dual comparator ....	.35	.29	.25
23000EC	LF398N	DIP-8	Sample and hold circuit	1.69	1.29	.89
23026EC	LF412CN*	DIP-8	Low offset drift JFET input dual op amp. .	1.45	1.05	.71
27422EC	LM555CN**	DIP-8	Timer (MC1455P/NE555V) ....	.29	.25	.19
126797EC	LMC555CN*	DIP-8	CMOS 555 timer ....	.54	.49	.44
24328EC	LM556N*	DIP-14	Dual 555 timer (MC3456P) ....	.49	.45	.39
24352EC	LM565N	DIP-14	Phased locked loop	1.49	1.29	1.19
24395EC	LM567V	DIP-8	Tone decoder ....	.49	.40	.37
27490EC	NE571N	DIP-16	Companion, subscriber	3.29	2.99	2.69
24539EC	LM741CN**	DIP-8	OP. amp. (ULN2151) ....	.29	.25	.19
24563EC	LM747CN	DIP-14	Dual 741 op amp.	3.65	2.78	2.15
23131EC	LM1458N*	DIP-8	Dual op amp. (RC4558) ....	.29	.26	.22
23157EC	LM1488N*	DIP-14	Quad line driver RS232 (75188) ....	.29	.25	.22
23181EC	LM1489N*	DIP-14	Quad line rec. RS232 (75189) ....	.24	.20	.18
23270EC	LM1875T	TO-220/5	20-watt power audio amp.	2.25	1.95	1.75
107140EC	LM1881N	DIP-8	Video synchronous separator	2.49	1.99	1.49
34278EC	ULN2003A*	DIP-16	Hi-volt/curr. darl. transistor array ....	.39	.35	.29
156566EC	LM2574N-5	DIP-8	Step-down 5-voltage regulator	2.49	2.19	1.95
39589EC	26LS31	DIP-16	Quad diff line driver ....	.79	.69	.62
39600EC	26LS32	DIP-16	Quad diff line receiver ....	.59	.44	.34
34315EC	ULN2803A*	DIP-18	Hi-volt. hi-curr. darl. transis. array ....	.69	.59	.49
23296EC	LM2901N	DIP-14	Quad comp. ....	.39	.29	.20
23350EC	LM2917N-8	DIP-8	Frequency to volt converter	2.45	1.75	1.25
107182EC	LM2940CT-5	TO-220/3	5V low dropout reg. (max. 45Vin)	1.29	1.19	1.09
12183EC	CA3130E	DIP-8	CMOS op. amp.	1.19	.89	.62
12204EC	CA3140E	DIP-8	Bi-MOS op amp. ....	.79	.71	.63
12239EC	CA3161E	DIP-16	BCD to 7-segment decoder driver	2.19	1.95	1.75
24168EC	CA3401N	DIP-14	Quad amp (LM3900N) (221-235) ....	.79	.69	.62
24230EC	LM3914N	DIP-18	Bar-graph display driver	2.25	2.02	1.82
24256EC	LM3915N	DIP-18	3 dB steps bar-graph disp. driver	2.49	1.99	1.55
27385EC	NE5532*	DIP-8	Dual low noise op amp ....	.69	.59	.49
51879EC	8038CCPD	DIP-14	Precision wave form generator	3.19	2.39	1.69
50964EC	75176	DIP-8	Differential bus transceiver ....	.89	.67	.47
51131EC	75492	DIP-14	Hex digit driver (492)	6.95	6.25	5.95

*10 pieces in Linear kit, below **20 pieces in Linear kit, below

Linear Series IC Cabinet Kit

Get a total of 480 pieces comprised of 40 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.



Part No	Description	See page 29 for kit details	1	10
84988EC	480 pcs. Linear IC cabinet kit (some of 40 types noted by **/**) ..		\$189.95	\$169.95



Analog Devices

More @ www.Jameco.com/IC

Part No.	Product No.	Pins	Description	1	10	50
115158EC	AD558JN	16	Microprocessor compat. 8-bit DAC	\$17.95	\$12.75	\$12.11
115174EC	AD620AN	8	Low cost instrument amplifier	17.95	15.95	14.35
115182EC	AD633JN	8	Low cost analog multiplier	12.95	9.69	7.69

MAXIM Type Interface Series

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
142535EC	MAX202CPE	16	+5V RS232 trans. requires 0.1µF caps	\$2.49	\$2.25	\$2.05
24811EC	MAX232CPE	16	+5V powered, dual RS232 transmitter/ receiver (0°C to +70°C) SP232ACP	2.19	1.75	1.45
106147EC	MAX232CWE♦	16	+5V powered, dual RS232 (SOIC) trans./rcvr.	1.95	1.75	1.59
106155EC	MAX232EPE	16	+5V powered, dual RS232 transmitter/receiver (-40°C to +85°C)	2.49	2.25	2.05
106163EC	MAX233CPP	20	+5V powered, multichannel RS232 drivers/receivers (no ext. components)	5.75	5.18	4.66
106171EC	MAX235CPG	24	+5V powered, five RS232 transmitter/ receiver (no ext. components)	9.95	8.95	7.85

♦ Surface mount

7400 Series

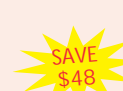
61 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
48979EC	7400**	14	Quad 2-input NAND gate	\$.65	\$.55	\$.45
49015EC	7402*	14	Quad 2-input NOR gate .....	.59	.49	.45
49120EC	7407**	14	Hex buffer/driver (O.C.) .....	.35	.32	.28
49146EC	7408*	14	Quad 2-input AND gate .....	.79	.55	.45
49728EC	7417*	14	Hex buffer/driver (O.C. hi-voltage) .....	.79	.59	.41
50593EC	7476	16	Dual JK flip-flop with preset and clear .....	.89	.73	.59
50631EC	7483	16	4-bit binary full adder .....	.89	.79	.69
50745EC	7493	14	4-bit binary counter	1.49	1.15	.78
49883EC	74189	16	64-bit RAM tri-state (DM8599N)	3.59	2.69	1.89
49912EC	74192	16	Decade up/down counter with clear	3.69	3.39	3.19
49955EC	74194	16	4-bit bi-directional shift register	1.39	1.25	1.15
88225EC	SDL001A	—	Texas Instruments TTL Data Book	34.95	31.49	29.95

*10 pieces included in 7400 kit below **20 pieces included in 7400 kit below

7400 Series IC Cabinet Kit

Get a total of 350 pieces comprised of 30 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.




Part No.	Description	See page 28 for kit details	1	10
84953EC	350 pcs. 7400 series IC cabinet kit (some of 30 types noted by **/**) ..		\$139.95	\$125.95

74C Series

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
44222EC	74C00	14	Quad 2-input NAND gate	\$.69	\$.55	\$.39
44231EC	74C04	14	Hex inverter (CD4069) .....	.74	.56	.39
44564EC	74C922	18	16-key keyboard encoder (INS8245N) ...	6.29	5.05	4.26
44572EC	74C923	20	20-key keyboard encoder (INS8246N) ...	6.29	5.05	4.25

Voltage Regulators

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pkg.	Description	1	10	100
23579EC	LM317T**	TO-220/3	1.5A adj. pos. reg. (1.2V-37V)	\$.49	\$.44	\$.39
23667EC	LM323K	TO-3/2	5V 3A positive reg.	3.19	2.78	2.12
192284EC	LM338T	TO-220/3	5A adjustable regulator	2.59	1.95	1.45
24467EC	LM723CN*	DIP-14	Voltage regulator (2V-37V) .....	.39	.29	.20
51182EC	78L05**	TO-92	5V 100mA pos. voltage regulator .....	.29	.26	.23
51203EC	78L12*	TO-92	12V 100mA pos. voltage regulator ....	.29	.22	.15
192233EC	78M05	TO-220/3	5V 500mA pos. voltage regulator .....	.35	.26	.18
192241EC	78M12	TO-220/3	12V 500mA pos. voltage regulator ....	.35	.32	.28
51262EC	7805T**	TO-220/3	5V 1A pos. voltage reg. (LM340T-5) ...	.35	.32	.28
51431EC	79L12	TO-92	12V 100mA neg. voltage regulator ....	.28	.25	.23
51457EC	7905T*	TO-220/3	5V 1A neg. voltage regulator .....	.39	.29	.20
51481EC	7912T*	TO-220/3	12V 1A neg. voltage regulator .....	.39	.35	.29

*10 pieces in Linear kit, left **20 pieces in Linear kit, left

Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

74LS Series55 more @ www.Jameco.com/IC

* Prepackaged: order in increments of 10 or 100

Part No.	Cross Ref.	Pins	Description	1	10	100
46252EC	74LS00**	14	Quad 2-input NAND gate	\$.31	\$.28	\$.24
46287EC	74LS02**	14	Quad 2-input NOR gate	.29	.25	.21
46316EC	74LS04**	14	Hex inverter	.29	.26	.23
46341EC	74LS05*	14	Hex inverter (O.C.)	.34	.26	.18
46367EC	74LS07	14	Hex buffer/driver (O.C. hi-voltage)	.84	.79	.74
46375EC	74LS08**	14	Quad 2-input AND gate	.36	.31	.29
46404EC	74LS10*	14	Triple 3-input NAND gate	.29	.22	.15
46439EC	74LS11*	14	Triple 3-input AND gate	.31	.25	.19
46460EC	74LS14*	14	Hex inverter Schmitt trigger	.29	.26	.23
47095EC	74LS20*	14	Dual 4-input NAND gate	.35	.25	.19
47458EC	74LS30*	14	8-input NAND gate	.29	.22	.15
47466EC	74LS32**	14	Quad 2-input OR gate	.29	.26	.23
47693EC	74LS38	14	Quad 2-input NAND gate buffer (O.C.)	.29	.22	.15
47790EC	74LS47*	16	BCD to 7-seg. decoder/driver (O.C.)	.72	.52	.45
47992EC	74LS73*	14	Dual JK flip-flop with clear	.49	.39	.25
48004EC	74LS74**	14	Dual D flip-flop	.29	.25	.22
48021EC	74LS75*	16	4-bit bi-stable latch	.55	.41	.29
48071EC	74LS85*	16	4-bit magnitude comparator	.35	.29	.25
48098EC	74LS86*	14	Quad EXCLUSIVE-OR gate	.35	.29	.19
48119EC	74LS90*	14	Decade counter	.49	.45	.39
48151EC	74LS93*	14	4-bit binary counter	.89	.79	.70
46480EC	74LS123*	16	Dual mono. multivibrator with clear	.33	.25	.19
46501EC	74LS125*	14	Quad bus buffer neg. enable tri-state	.39	.29	.21
46607EC	74LS138**	16	3 to 8 decoder/demultiplexer	.38	.35	.29
46623EC	74LS139*	16	2 to 4 decoder/demultiplexer	.36	.32	.29
46703EC	74LS151*	16	8-bit input multiplexer	.39	.35	.31
46738EC	74LS154	24	4 to 16 line decoder/demultiplexer	2.49	2.25	2.05
46754EC	74LS155*	16	Dual 2/4 demultiplexer	.39	.29	.20
46771EC	74LS157*	16	Quad 2/1 data selector	.29	.22	.15
46931EC	74LS174*	16	Hex D flip-flop with clear	.29	.22	.15
46957EC	74LS175*	16	Quad D flip-flop with clear	.35	.31	.27
47010EC	74LS192	16	Decade up/down counter with clear	3.95	3.59	3.25
47036EC	74LS193*	16	Binary up/down counter with clear	.59	.49	.45
47141EC	74LS240*	20	Octal invert. line driver tri-state	.44	.33	.23
47167EC	74LS241	20	Octal bus/line driver tri-state	.39	.29	.19
47175EC	74LS243	14	Quad transceiver tri-state	*	.15	.14
47183EC	74LS244*	20	Octal driver tri-state	.44	.35	.25
47212EC	74LS245*	20	Octal bus transceiver tri-state	.45	.39	.35
47386EC	74LS273*	20	Octal D-type flip-flop with clear	.39	.35	.29
47600EC	74LS373*	20	Octal D flip-flop tri-state	.45	.39	.35
47634EC	74LS374*	20	Octal D F/F edge-trig tri-state	.45	.39	.34
47669EC	74LS377	20	Octal D register common enable	.53	.40	.34
47722EC	74LS390	16	Dual 4-bit decade counter	.49	.39	.25
47861EC	74LS540	20	Octal invert. buffer/line driver tri-state	.59	.53	.47
47870EC	74LS541	20	Octal buffer/line driver tri-state	.69	.59	.49
64418EC	74LS573	20	Octal D-type F/F latch tri-state	1.49	1.15	.78
47984EC	74LS688	20	8-bit magnitude comparator	1.09	.89	.69

* 10 pieces in 74LS kit below

** 20 pieces in 74LS kit below

74LS Series IC Cabinet Kit

SAVE \$30



Get a total of 420 pieces comprised of 35 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.

Part No.	Description	See page 29 for kit details	1	10
84961EC	420 pc. 74LS series IC cabinet kit (some of 35 types noted by */**)		\$119.99	\$107.99

IC Test Clip Series

- For temporary connections to DIP package components
- Heavy-duty spring loaded hinge provides positive contact
- 20 AWG insulated gold contacts
- Color: white

22103EC



Part No.	Cross Ref.	Description	1	10	25
22103EC	JTC16	16-pin (for 8, 14 and 16-pin ICs)	\$6.95	\$6.25	\$5.59
22120EC	JTC20	20-pin (for 18 and 20-pin ICs)	8.95	6.50	5.35
22162EC	JTC28	28-pin	10.95	9.95	8.95

Color Code Legend
SALE REFURBISHED CLOSEOUT

74HC Series41 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
45161EC	74HC00	14	Quad 2-input NAND gate (6231581)	\$.25	\$.19	\$.15
45188EC	74HC02	14	Quad 2-input NOR gate	.19	.15	.10
45794EC	74HC32	14	Quad 2-input OR gate	.22	.15	.12
46130EC	74HC74	14	Dual D flip-flop	.35	.26	.18
45541EC	74HC192	16	Decade up/down counter with clear	1.59	1.19	.83
45612EC	74HC240	20	Octal inverting line driver tri-state	.49	.37	.26
45655EC	74HC244	20	Octal driver tri-state	.45	.39	.29
45831EC	74HC373	20	Octal D-type flip-flop tri-state	.45	.39	.35
46050EC	74HC541	20	Octal buffer/line driver tri-state	.69	.55	.35
46084EC	74HC574	20	Octal D-type flip-flop tri-state	.59	.44	.31
46105EC	74HC595	16	8-bit serial-to-parallel shift reg. tri-state	.62	.44	.39

74HCT SeriesMore @ www.Jameco.com/IC

* Prepackaged: order in increments of 10 or 100

Part No.	Cross Ref.	Pins	Description	1	10	100
44871EC	74HCT00	14	Quad 2-input NAND gate (Y560820T)	\$.29	\$.22	\$.15
44898EC	74HCT04	14	Hex inverter	.29	.22	.16
44901EC	74HCT08	14	Quad 2-input AND gate	.25	.19	.12
44935EC	74HCT14	14	Hex inverter Schmitt trigger	.39	.29	.20
45057EC	74HCT32	14	Quad 2-input OR gate	.34	.26	.18
45137EC	74HCT74	14	Dual D flip-flop	*	.12	.10
44927EC	74HCT138	16	3-to-8 decoder/demultiplexer	.29	.22	.15
63773EC	74HCT139	16	2-to-4 decoder/demultiplexer	.29	.25	.22
88057EC	74HCT154	24	4-to-16 decoder/demultiplexer	1.59	1.19	.85
45014EC	74HCT240	20	Octal inverting line driver tri-state	.49	.37	.26
45022EC	74HCT244	20	Octal driver tri-state	.39	.29	.19
45031EC	74HCT245	20	Octal transceiver tri-state	.45	.33	.23
45049EC	74HCT273	20	Octal D-type flip-flop with clear	.39	.35	.31
45065EC	74HCT373	20	Octal D-type flip-flop tri-state	.49	.39	.29
45073EC	74HCT374	20	Octal D-type flip-flop edge-trig. TS	.49	.39	.29
99303EC	74HCT541	20	Octal buffer/line driver tri-state	.69	.59	.39
45090EC	74HCT573	20	Octal D-type latch flip-flop tri-state	.69	.49	.34
45102EC	74HCT574	20	Octal D-type flip-flop edge-trigger tri-state	.69	.52	.36
45129EC	74HCT688	20	8-bit magnitude comparator	.69	.59	.49

4000 Series35 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
12562EC	CD4001**	14	Quad 2-input NOR gate	\$.29	\$.24	\$.21
12634EC	CD4011**	14	Quad 2-input NAND gate	.29	.24	.21
12677EC	CD4013**	14	Dual D flip-flop with set/reset	.39	.34	.25
12706EC	CD4015*	16	Dual 4-stage static shift register	.39	.35	.31
12722EC	CD4016*	14	Quad bilateral switch	.29	.25	.22
12749EC	CD4017*	16	Decade counter/divider	.39	.35	.31
12802EC	CD4020*	16	14-stage binary/ripple counter	.55	.49	.44
12845EC	CD4023*	14	Triple 3-input NAND gate	.29	.23	.17
12853EC	CD4024*	14	7-stage binary counter	.39	.33	.25
12950EC	CD4040*	16	12-stage binary/ripple counter	.39	.35	.29
13055EC	CD4049**	16	HEX/buffer/converter (inverting)	.29	.24	.21
13071EC	CD4050*	16	Hex/buffer/converter (N-inverting)	.29	.26	.23
13098EC	CD4051*	16	Single 8-channel multi./demultiplexer	.45	.39	.35
13231EC	CD4069*	14	Hex inverter (74C04)	.29	.26	.23
13258EC	CD4070*	14	Quad EXCLUSIVE-OR gate (74C86)	.29	.26	.23
13354EC	CD4081*	14	Quad 2-input AND gate	.25	.19	.17
13493EC	CD4511*	16	BCD to 7-seg. latch/decoder/driver	.69	.59	.49
13581EC	CD4520	16	Dual binary up counter	.49	.37	.26
13653EC	CD4538*	16	Dual precision monostable multivibrator	.59	.53	.48
13709EC	CD4553	16	3-digit BCD counter	2.95	2.75	2.49

* 10 pieces in CD4000 kit below

** 20 pieces in CD4000 kit below

CD4000 Series IC Cabinet Kit

SAVE \$32

Get a total of 300 pieces comprised of 25 different ICs and save big! Includes 20-drawer component cabinet with drawers dividers and adhesive labels for labeling.



Part No.	Description	See page 29 for kit details	1	10
84970EC	300 pc. CD4000 series IC cabinet kit (some of 25 types noted by */**)		\$79.95	\$71.95

Call for pricing on quantities over 100 – we carry major manufacturers.

We will special order any IC – 100 Piece Minimum

EPROM

52 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
40002EC	2716	24	2k x 8 16kB 450ns (25V)	\$3.99	\$3.59	\$3.19
40011EC	2716-1	24	2k x 8 16kB 350ns (25V)	6.49	5.89	5.39
39706EC	27C16	24	2k x 8 16kB 450ns (25V) CMOS	7.25	6.55	5.99
40096EC	2732	24	4k x 8 32kB 450ns (25V)	6.49	4.89	3.45
40109EC	2732A-20	24	4k x 8 32kB 200ns (21V)	6.49	5.99	5.49
40192EC	2764-20	28	8k x 8 64kB 200ns (21V)	5.25	3.95	2.79
40248EC	2764A-25	28	8k x 8 64kB 250ns (12.5V)	3.49	3.15	2.85
105304EC	27C64-12	28	8k x 8 64kB 120ns (12.5V) CMOS ..	6.49	5.99	5.49
39829EC	27C64-15	28	8k x 8 64kB 150ns (12.5V) CMOS ..	5.49	4.99	4.49
74608EC	27C64-20	28	8k x 8 64kB 200ns (12.5V) CMOS ..	4.69	4.29	3.79
39933EC	27128-25	28	16k x 8 128kB 250ns (21V)	5.95	4.49	3.15
87935EC	27C128-12	28	16k x 8 128kB 120ns (12.5V) CMOS ..	4.49	3.99	3.59
39677EC	27C128-15	28	16k x 8 128kB 150ns (12.5V) CMOS ..	4.29	3.85	3.45
40037EC	27256-15	28	32k x 8 256kB 150ns (12.5V)	3.25	3.09	2.75
140476EC	27C256-70	28	32k x 8 256kB 70ns (12.5V) CMOS ..	3.59	3.39	3.09
112740EC	27C256-10	28	32k x 8 256kB 100ns (12.5V) CMOS ..	3.35	3.15	2.85
65904EC	27C256-12	28	32k x 8 256kB 120ns (12.5V) CMOS ..	3.25	3.15	2.79
39714EC	27C256-15	28	32k x 8 256kB 150ns (12.5V) CMOS ..	3.25	3.09	2.75
40168EC	27512-25	28	64k x 8 512kB 250ns (12.5V)	2.55	2.35	2.14
175206EC	27C512-90	28	64k x 8 512kB 90ns (12.5V) CMOS ..	3.45	3.25	2.95
118148EC	27C1024-15	40	64k x 16 1024kB 150ns (12.5V) CMOS ..	5.95	5.55	4.99
39669EC	27C010-20	32	128k x 8 1024kB 200ns (12.5V) CMOS ..	3.89	3.68	3.38
78852EC	27C020-12	32	256k x 8 2048kB 120ns (12.5V) CMOS ..	5.63	5.22	4.71
127933EC	27C4096-12	40	256k x 16 4096kB 120ns (12.5V) CMOS ..	9.22	8.60	7.85
111780EC	27C040-10	32	512k x 8 4096kB 100ns (12.5V) CMOS ..	6.92	6.41	5.90
102293EC	27C040-12	32	512k x 8 4096kB 120ns (12.5V) CMOS ..	6.92	6.41	5.90
156275EC	27C080-10	32	1M x 8 8192kB 100ns (12.5V) CMOS ..	12.91	11.99	10.96
140003EC	27C080-12	32	1M x 8 8192kB 120ns (12.5V) CMOS ..	12.91	11.99	10.96

See EPROM programmers on page 37

EPROM Accessories

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Description	1	10
66042EC	DE1	UVP portable EPROM eraser, pg 37	\$64.95	\$58.95
15712EC	DE4	8-chip UV-EPROM eraser, pg 37	109.95	104.95

EEPROM

15 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
108847EC	24C04P	8	512 x 8 4096-bit serial (CMOS)	\$8.99	\$7.79	\$6.69
74691EC	28C16A-25	24	2k x 8 16k 250ns (5V) CMOS	3.99	3.69	3.39
74827EC	28C64A-25	28	8k x 8 64k 250ns (5V) CMOS	4.49	4.05	3.65
74878EC	28C256-25	28	32k x 8 256k 250ns CMOS	8.75	6.85	6.05

PROM

15 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
27781EC	N82S129	16	256 x 4 1024-bit PROM tri-state (27S21) ..	\$7.95	\$6.95	\$6.25
48717EC	74S288	16	32 x 8 Tri-state (27S19/TBP18S030N) ..	4.95	3.75	2.65

GAL

8 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
39167EC	22V10-25	24	25ns 132 x 44 AND array Lattice	\$3.99	\$3.49	\$3.09

Static RAM

16 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
38957EC	2114N	18	1k x 4 450ns (9114BPC)	\$2.25	\$1.99	\$1.79
38973EC	2114N-2	18	1k x 4 200ns (9114EPC) (U214D20)	2.49	2.25	2.05
38981EC	2114N-2L	18	1k x 4 200ns low power	2.49	2.25	2.05
42198EC	5101	22	256 x 4 450ns (CMOS)	7.99	7.19	6.49
42930EC	6264P-12	28	8k x 8 120ns (64kB) CMOS	2.65	2.39	2.15
85121EC	6264LP-70	28	8k x 8 70ns (64kB) LP CMOS	3.39	2.99	2.69
42884EC	6264LP-10	28	8k x 8 100ns (64kB) LP CMOS	2.75	2.49	2.25
82472EC	62256LP-70	28	32k x 8 70ns low power CMOS	5.49	4.99	4.49
42833EC	62256LP-10	28	32k x 8 100ns low power CMOS	4.35	3.95	3.55
42850EC	62256LP-12	28	32k x 8 120ns low power CMOS	3.85	3.49	3.15
75037EC	ATT7C199P-15	28	32k x 8 15ns high speed CMOS (.3"W) ..	3.39	2.99	2.69
131810EC	628128LP-70	32	128k x 8 70ns low power CMOS	8.95	7.79	6.99
157358EC	628512LP-70	32	512k x 8 70ns low power CMOS	19.99	17.99	16.19

** Pull

Flash Memory

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	50
74835EC	28F020-15	32	256k x 8 150ns (12V) CMOS	\$7.95	\$7.15	\$6.45

AT89C Series

More @ www.Jameco.com/IC

Part No.	Product No.	Pins	Description	1	10	100
168874EC	AT89C2051-24PC	20	8-bit MCU, 24MHz 2kb flash memory ...	\$3.59	\$2.39	\$2.15
168891EC	AT89C51-20PC	40	8-bit MCU, 20MHz 4kb flash memory	4.25	3.84	3.49
168938EC	AT89C52-24JC	44	8-bit MCU, 24MHz 8kb flash mem. PLCC ..	4.35	2.83	2.53

CPUs/MPUs

27 more @ www.Jameco.com/IC

Part No.	Description	MHz	Socket	1	10	25
118421EC	486 speed doubler (Intel), 80486DX2	66	168/PGA	\$19.95	\$17.95	\$16.15
130833EC	Pentium® processor	133	296/PGA	29.95	26.95	24.25
130841EC	Pentium® processor	166	296/PGA	\$4.99	41.25	28.89
189296EC	** Pentium® processor	200	296/PGA	69.95	52.49	36.75
140054EC	** Pentium MMX® processor	200	376/PGA	49.95	37.45	26.25
150501EC	Pentium MMX® processor	233	376/PGA	69.95	62.95	54.95
190060EC	Pentium® II processor with heat sink	233	Slot 1	89.95	79.95	72.95
151651EC	Pentium® II processor	300	Slot 1	109.99	99.99	89.99
183100EC	Pentium® II processor	400	Slot 1	124.99	109.99	99.99
192751EC	Athlon, A0750MPR24B	750	Slot A	129.95	97.49	68.25
183118EC	Pentium® III processor	600	Slot 1	159.95	144.95	130.45

** Pull

Dynamic Video RAM

9 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
41339EC	4116-15	16	16k x 1 150ns (MM5290J-1R)	\$9.99	\$8.99	\$8.80
128688EC	HM514260	SOJ	256k x 16 70ns	3.39	2.99	2.69

5000 Series

6 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	50
32803EC	TCM5089N	16	Integrated tone dialer chip	\$4.95	\$4.49	\$4.05

6500 Series

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
43166EC	** 65C02	40	MPU with internal clock (CMOS)	\$6.95	\$5.25	\$3.65
43254EC	** 6522		40VIA (versatile interface adapter) 1MHz	2.39	2.15	1.94

** Pull

6800 Series

15 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
43481EC	** 6800	40	8-bit MCU	\$6.95	\$5.25	\$3.65
43502EC	6802	40	8-bit MPU with clock and RAM (1MHz) ..	8.69	7.82	6.99
132484EC	MC68HC705C8S	40	8-bit HCMOS MCU, 8k bytes, EPROM ..	38.95	34.95	31.55

** Pull

8000 Series

51 more @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
51844EC	** 8031	40	CPU with 128 x 8 RAM and I/O	\$3.29	\$2.99	\$2.69
102197EC	8032	40	8-bit MCU 256 x 8 RAM	3.95	3.59	3.25
51991EC	** 8051AP**	40	MCU w/128x8 RAM (book P/N 161402, pg 58) ..	5.49	4.99	4.49
125647EC	80C52BASIC	40	CPU 8-bit CMOS with basic interpreter	19.95	17.95	16.15
51705EC	80C85	40	CPU 8-bit N-channel (3MHz)(CMOS)	6.95	5.25	3.65
52142EC	** 8088	40	CPU 16-bit (8-bit data bus) 5MHz	2.49	2.25	1.99
52708EC	** 8254	24	Prog. interval timer (UPD71054)	4.49	3.99	3.59
52724EC	** 8255	40	Prog. peripheral I/O (PPI) 71055 (2MHz)	4.49	3.99	3.49
52732EC	** 8255A-5	40	Prog. peripheral I/O (PPI) 5MHz	4.89	4.39	2.89
52425EC	** 82C55A-5	40	Prog. peripheral I/O (PPI) CMOS (5MHz)	4.49	3.99	3.49
52759EC	** 8256	40	Multif. universal asynch. rec./trans.	19.99	17.99	16.19
52871EC	** 8284A	18	Clock gen. and driver (UPD71084)	4.49	3.99	3.59
52978EC	** 87C51	40	CPU w/ 4Kx8 EPROM & 128x8 RAM(3.5-12MHz) ..	21.99	16.49	11.55

** Tie pin 31 low to bypass the internal ROM

** Pull

9000 Series

More @ www.Jameco.com/IC

Part No.	Cross Ref.	Pins	Description	1	10	100
53663EC	9368	16	FND70 driver/latch	\$4.49	\$3.95	\$3.55
10567EC	** AM9513APC	40	System timing controller	39.95	29.99	20.99

** Pull

Call for pricing on quantities over 100 – we carry major manufacturers.


We will special order any IC – 100 Piece Minimum

MOTOROLA Type Series More @ www.Jameco.com/IC									
Part No.	Cross Ref.	Pins	Description	1	10	100			
24942EC	MC1350P	8	Video IF amp (12V operation)	\$1.29	\$1.19	\$1.09			
25216EC	MC3479P	16	Biphasic stepper motor driver	5.75	5.18	4.65			
25232EC	MC3486P	16	Quad EIA-422/423 line rec. w/ 3-state outputs	.59	.49	.45			
25259EC	MC3487P	16	Quad EIA-422 line driver w/ 3-state outputs	.69	.52	.36			
25275EC	MC4044P	14	Frequency phase detector (11C44)	9.99	7.49	5.25			
25064EC	MC14490P	16	Hex contact bounce eliminator	6.95	6.25	5.59			
118586EC	MC145151P	28	Parallel input PLL freq. synthesizer	5.95	5.39	4.85			
25101EC	MC146818	24	Real time clock plus RAM	4.95	3.75	2.95			

* Pull

DALLAS SEMICONDUCTOR Semiconductor 11 more @ www.Jameco.com/IC									
Part No.	Product No.	Pins	Description	1	10	100			
133410EC	DS1216C	28	Smartwatch/RAM 64K/256k	\$29.49	\$27.39	\$16.45			
114278EC	DS1225AB-150	28	64k nonvol. SRAM 5%pw, 4.62V WP	16.39	12.95	8.75			
177113EC	DS1230Y-100	28	256k nonvol. SRAM 10%pw, 4.37V WP	19.99	17.99	15.99			
176778EC	DS1302	8	Trickle charge time keeping IC	2.49	2.25	2.05			
114374EC	DS1387	24	RAMified real time clock 4kx8	8.95	8.15	7.25			
114382EC	DS1620	8	Digital thermometer and thermostat	5.49	4.95	3.89			

* Pull



CMOS PIC Microcontrollers

30 more @
www.Jameco.com/IC

Part No.	Product No.	Pins	Conf.	Speed (MHz)	EPROM Bits	RAM Bytes	I/O Lines	1	10	100
145040EC	PIC12C508-04/P	8	OTP	4	512 x 12	25	5	\$1.75	\$1.49	\$1.25
134172EC	PIC16C56-RC/P	18	OTP	20	1k x 12	25	12	3.75	3.49	3.25
193447EC	PIC16F628-20/P	18	Flash	20	2k x 14	224	16	3.25	2.92	2.63
145111EC	PIC16F84-04/P	18	Flash	4	1k x 14	68	13	5.95	5.35	4.75
145120EC	PIC16F84-10/P	18	Flash	10	1k x 14	68	13	6.85	6.51	6.19
193332EC	PIC16F84A-20/P	18	Flash	20	1k x 14	68	13	5.95	5.35	4.82
193367EC	PIC16F876-20/SP	28	Flash	20	256 x 8	368	22	8.19	7.37	6.63
176882EC	PIC16F877-20/P	40	Flash	20	256 x 8	368	33	9.49	8.49	7.49

REMOTE CONTROL Remote Control Decoders									
Part No.	Product No.	Pins	Description	1	10	100			
126607EC	HT648L	24	Decoder 10-bit address / 8-bit latch data ..	\$3.29	\$2.99	\$2.69			

UARTs More @ www.Jameco.com/IC									
Part No.	Cross Ref.	Pins	Description	1	10	100			
27596EC	NS16550AN	40	Univ. asynch. rcvr./trans. w/ FIFO (PC16550DN)	\$5.95	\$4.49	\$3.15			

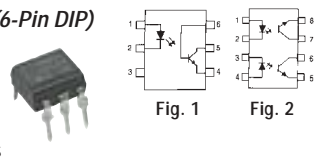
A/D Converters More @ www.Jameco.com/IC									
Part No.	Cross Ref.	Pins	Description	1	10	100			
10153EC	ADC0804LCN	20	8-bit A/D converter (1 LSB)	\$2.69	\$2.39	\$2.09			

Harris/Intersil Type Series More @ www.Jameco.com/IC									
Part No.	Cross Ref.	Pins	Description	1	10	100			
43756EC	7107CPL	40	3 1/2-digit LED single-chip A/D converter	\$3.49	\$2.79	\$2.59			
51140EC	7555IPA	8	CMOS timer (LM555CN)	.59	.49	.45			
51879EC	8038CCPD	14	Waveform generator/volt control OSC	3.19	2.39	1.69			

Optoisolators 23 more @ www.Jameco.com

Photo Transistors General Purpose (6-Pin DIP) Single & Dual Channel

- Base lead connected
- NPN output transistor
- I_{CEO} (dark) $V_{ce} = 10V$: 50nA max.
- Isolation test voltage: 7.5k V-P; 5.3k Vrms



Part Number	Mfr. Cross Ref. No.	Fig.	Curr. Transfer Ratio (Min%)	Cont. Fwd. Curr. Max. (mA)	Vce (Sat) Max. (V)	Pricing			
						1	10	100	500
40985EC	4N25	1	20	50	0.5 (If = 50mA) (Ic = 2mA)	\$.29	\$.25	\$.22	\$.19
41056EC	4N35	1	100	50	0.3 (If = 10mA) (Ic = 5.0mA)	.39	.35	.25	.16
24918EC*	MCT6	2	20	50	0.4 (If = 16mA) (Ic = 0.2mA)	.49	.45	.39	.35

* 2 independent isolators in one package, 8-pin DIP

Microcontrollers

80C52-BASIC Microcontroller

The 80C52-BASIC chip is a custom-masked 80C52 microcontroller with a full-featured 8k-byte ROM-resident BASIC-52 interpreter.

- Hardware:**
- On-chip oscillator and clock circuit
 - Operates DC to 12MHz
 - 256 x 8-bit RAM
- Software:**
- Full BASIC interpreter in ROM on a single chip
 - "Stand-alone" software development
 - Interrupts can be handled by BASIC or Assembly Language



Part No.	Product No.	Description	1	10	100
125647EC	80C52BASIC	CPU 8-bit CMOS w/ BASIC interpreter	\$19.95	\$17.95	\$16.15

Voice Chips

Single-Chip Voice Record/Playback Devices 10 to 120 Second Durations (28-pin DIP)

- Easy-to-use single-chip voice recording and playback
- Manual switch or microprocessor controllable
- Directly cascadable for longer durations
- Fully addressable to handle multiple messages
- Zero-power message storage – eliminates battery backup circuits
- Single voltage operation: +5V (4.5V to 5.5V operating range)
- Automatic power-down (push-button mode)
- Playback can be edge or level-activated
- 100-year message retention (typical)
- On-chip automatic gain control (AGC)



Part No.	Product No.	Description	1	10	50
141671EC	ISD1110P	Voice record/playback (10 sec.)	\$4.29	\$3.99	\$3.79
107334EC	ISD1420P	Voice record/playback (20 sec.)	5.39	5.09	4.89
120643EC	ISD2560	Voice record/playback (60 sec.)	8.99	8.49	7.99
120660EC	ISD2590	Voice record/playback (90 sec.)	8.99	8.49	7.99
141655EC	ISD25120P	Voice record/playback (120 sec.)	8.99	8.49	7.99

Digital Interface ICs More @ www.Jameco.com/IC

Stepper Motor Controllers

Designed to interface a logic level input byte to a stepper motor.

Part No.	Product No.	Pins	Description	1	10	50
141532EC	EDE1200	18	Unipolar stepper motor controller	\$8.95	\$7.95	\$6.95
157526EC	EDE1204	18	Bipolar stepper motor controller	8.95	7.95	6.95

KAE Servo Motor Controller More @ www.Jameco.com/IC

Controllers operate from standard 8-bit serial interface (RS232 or RS485). Using RS485, any mix of up to 32 controllers may be operated from a single serial port. Complete documentation.

PIC-SERVO Motion Control Chipset for DC Motors

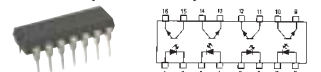
- PIC servo control for DC motors with digital encoders
- 32-bit position, velocity, and acceleration resolution
- PWM and direction outputs connect to servo amplifier
- Two chip set (PIC-SERVO 28-pin and PIC-ENC 18-pin)



Part No.	Description	Pins	1	10	50
146472EC	PIC-SERVO chip set, 0.3" DIP	28/18	\$34.95	\$29.95	\$27.95

Transistor/Detector Quad Channel (16-Pin DIP)

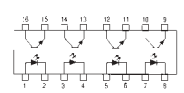
- High Isolation voltage/CTR/sensitivity
- 4 independent isolators in one package
- Isolation test voltage: 7.5k V-P; 5.3k Vrms



Part Number	Product Number	Curr. Trans. Ratio (Min%)	Cont. Fwd. Curr. Max. (mA)	Pricing			
		If = 10mA Vce = 10V		1	10	100	500
114083EC	ISQ203	225-450	50	\$2.95	\$2.65	\$2.39	\$2.15

Photo Transistor/Detector (16-Pin DIP)

- Isolation test voltage: 7.5k V-P; 5.3k Vrms
- NPN transistor
- Continuous forward current (max.): 50mA
- Photo transistor/detector



Part Number	Product Number	Curr. Transfer Ratio (Min%)	BECE (Ic = 1mA)	Vce (Sat) If = 10mA; Ic = 2mA	Pricing			
					1	10	100	500
160338EC	PS2501-4	80-6000	80V	0.3V max.	\$1.55	\$1.39	\$1.25	\$1.15

Aluminum Radial-Lead Electrolytic Capacitors

General purpose low voltage 85°C (A); HT Type 105°C (B) ±20%



Operating temperature range	-40°C to +85°C (A); -40°C to +105°C (B)
Leakage Current (20°C)	After 1 min. 0.03CV or 4μA, whichever is greater
	After 2 min. 0.01CV or 3μA, whichever is greater

* Prepackaged: order in increments of 10, 100 or 1000

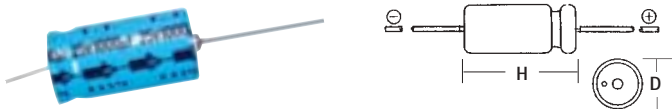
Part Number	Mfr. Cross Ref. No. †	Op. Temp	Value (μF)	Volt. (V)	Size (mm)* D x H	Pricing			
						1	10	100	500
94160EC	5R1/50	A	1	50	4x5	*	\$.12	\$.08	\$.05
29831EC	R1/50	A	1	50	5x11	*	.09	.07	.05
93729EC	R2.2/50	A	2.2	50	5x11	*	.10	.08	.045
135183EC	R3.3/50	A	3.3	50	5x11	*	.07	.05	.035
31000EC	R4.7/50	A	4.7	50	5x11	*	.09	.06	.045
94220EC	5R10/35	A	10	35	5x5	*	.15	.12	.06
198942EC	R22J/35	A	22	35	5x11	*	.035	.03	.025
198926EC	R33J/25	A	33	25	5x11	*	.045	.035	.025
93745EC	R33/50	A	33	50	6x11	*	\$.055	\$.05	\$.045
198951EC	R47J/35	A	47	35	5x10	*	.05	.04	.03
198969EC	R100J/35	A	100	35	6.3x11	*	.07	.06	.05
31181EC	R470/25	A	470	25	10x16	*	.12	.10	.09
30015EC	R1000/16	A	1000	16	13x21	*	.15	.13	.10
93841EC	R1000/50	A	1000	50	16x26	.52	.46	.41	.34
199110EC	R1000J/100	A	1000	100	18x40	3.59	2.69	1.99	1.55
30533EC	R2200/25	A	2200	25	16x36	.45	.39	.35	.30
158431EC	R2200B50	B	2200	50	16x31	.99	.89	.70	.61
93850EC	R4700/25	A	4700	25	18x35	.79	.69	.62	.55
199005EC	R4700J/35	A	4700	35	18x35.5	2.95	2.19	1.69	1.25
163301EC	R4700/50	A	4700	50	22x42	1.99	1.79	1.50	1.31

† RADIAL CAPACITOR CROSS REFERENCES * Capacitor dimensions and lead spacing may vary

Elna: RC2/RE2; IC: RAR/RSS; Marcon: SEM/SSM; Nichicon: LB/VX/USA/SR/SA; Rubycon: MS7/TWSS; Sprague: 501D/513D; UCC: SME/SRE/SRA/SRG; Panasonic: KA/KS/SU

Aluminum Axial-Lead Electrolytic Capacitors

General purpose low voltage 85°C



Operating temperature range	-40°C to +85°C
Leakage Current (After 2 minutes 20°C)	0.02CV or 2μA, whichever is greater

* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No. †	Value (μF)	Voltage (V)	Size (mm)* D x H	Pricing			
					1	10	100	500
10866EC	A1/50	1	50	5x13	*	\$.15	\$.115	\$.09
93569EC	A2.2/50	2.2	50	6x13	*	.19	.14	.10
199267EC	A22J/25	22	25	6x12	*	.20	.14	.10
199355EC	A47J/35	47	35	6.3x16	*	.20	.14	.10
93551EC	A100/35	100	35	8x16	*	.24	.19	.14
93649EC	A1000/35	1000	35	13x26	.79	.71	.65	.57
199478EC	A2200J/50	2200	50	18x42	2.55	2.10	1.95	1.75

* Capacitor dimensions may vary

† AXIAL CAPACITOR CROSS REFERENCES: Elna: RE2; IC: RAR; Marcon: SEM; Nichicon: LB/VX; Rubycon: TWSS; Sprague: 501D/513D; UCC: SME; Panasonic: SU

191 More @ www.Jameco.com/Capacitors

Jameco carries a wide variety of capacitors.
Also see our website for memory
back-up and snap-in devices.



Ceramic Disc Capacitors (±20%)

25 and 50 Volt, Z5U Temperature Coefficient

Operating temperature range	+10°C to +85°C
Cap. change over temp. range	+22% to -56%
Dielectric withstanding voltage	2.5 times rated volt. for not < 1 sec.

• Prepackaged: order in increments of 10, 100 or 1000

Ceramic Disc Capacitors can be special ordered on ammo-style tape – 1000 piece minimum

Part Number	Mfr. Cross Ref. No.	Capacitance	Voltage (V)	Dia.* (mm)	Pricing			
					10	100	1000	5000
15333EC	DC10	10pF	50	5	\$.07	\$.05	\$.02	\$.015
15405EC	DC22	22pF	50	6	.07	.05	.025	.02
15190EC	DC.001	.001μF	50	6	.06	.05	.025	.022
15253EC	DC.047	.047μF	50	8	.07	.06	.05	.04
151116EC	DC.1/25	.1μF	25	6	.14	.13	.08	.07

* Capacitor dimensions and lead spacing may vary

Monolithic Ceramic Capacitors (±20%) (Z5U Series)

Applications:

- Data processing
- Communications engineering

Operating temperature range: -10°C to +85°C

Ceramic Disc Capacitors can be special ordered on ammo-style tape – 1000 piece minimum

* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No.	Capacitance	Volt. (V)	Size (mm)* W x T x H	Pricing			
					1	10	100	5000
81541EC	MD10	10pF	50	3.5 x 2.0 x 3.0	*	\$.10	\$.07	\$.045
81533EC	MD22	22pF	50	4.0 x 2.0 x 4.0	*	.095	.073	.045
81525EC	MD100	100pF	50	3.5 x 2.0 x 3.0	*	.09	.07	.045
25507EC	MD.01	.01μF	50	3.5 x 2.0 x 3.0	*	.09	.06	.04
57621EC	MD.047	.047μF	50	2.5 x 2.5 x 3.0	*	.10	.07	.05
25523EC	MD.1	.1μF	50	6.0 x 2.0 x 4.0	*	.07	.06	.04
25558EC	MD.47	.47μF	50	4.5 x 2.5 x 4.5	*	.25	.19	.13
81509EC	MD1	1μF	50	6.0 x 3.0 x 7.0	.58	.52	.46	.37

* Capacitor dimensions and lead spacing may vary

Dipped Tantalum Capacitors (±10%)

Resin Dipped Solid Tantalum Capacitors

- Flame retardant coating
- Exceptional temperature stability
- Low leakage current
- Moisture-resistant
- Designed for entertainment and commercial equipment

Operating temp. range	-55°C to +85°C (+125°C with derating)
Rated voltage DC	≤ + 85°C

* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No. †	Capacitance	Volt. (V)	Size (mm)* D x H	Pricing			
					1	10	100	1000
33486EC	TM.1	.1μF	35	4.5 x 7.0	*	\$.25	\$.20	\$.18
33507EC	TM.22	.22μF	35	4.5 x 7.0	*	.25	.19	.15
33523EC	TM.33	.33μF	35	4.5 x 7.0	*	.17	.15	.13
154860EC	TM1/25	1μF	25	3.0 x 6.0	*	.29	.25	.22
33662EC	TM1	1μF	35	4.5 x 7.0	*	.29	.25	.22
33734EC	TM2.2	2.2μF	35	4.5 x 7.5	.39	.35	.29	.25
94043EC	TM4.7/25	4.7μF	25	5.0 x 8.5	.50	.45	.39	.35
33806EC	TM4.7	4.7μF	35	5.5 x 9.0	.55	.48	.37	.27
94060EC	TM10/16	10μF	16	5.0 x 9.0	.45	.40	.31	.26
94078EC	TM10/25	10μF	25	5.5 x 9.0	.59	.50	.40	.36
33689EC	TM10	10μF	35	6.0 x 10.0	.89	.79	.69	.59
94094EC	TM22/16	22μF	16	6.0 x 10.0	.69	.59	.49	.45
94107EC	TM22/25	22μF	25	7.0 x 10.5	1.79	1.60	.93	.89
33785EC	TM33	33μF	25	8.0 x 13.0	2.59	2.25	1.79	1.22

* Capacitor dimensions and lead spacing may vary

† Dipped Tantalum Capacitor Cross References

Panasonic: EF Series; AVX: Tap Series; Sprague: 196D and 199D;

Kemet: T350/ T360; Mepco: 49GS; NEC: DN; Nichicon: 599; NIC: NDTM; Hitachi: TSD-3; Matsuo: 202



Single Resistor Value Pricing: 1/4-Watt Carbon Film Resistors (±5%)

To order: Use 5-digit part number adjacent to ohms in chart below
Values may not be combined for quantity price breaks

Pricing (Sold in bags of 100 pieces)				
Specify Part No. & Resistor Value (see Standard Resistor Value Chart below)	1 Bag	10 Bags	50 Bags	100 Bags
	\$.99/bag	\$.57/bag	\$.49/bag	\$.46/bag

99¢/bag
100 piece bags

For resistor values you can refer to our website @ www.Jameco.com

Standard Resistor Values Chart

Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms	Part No.	Ohms
29882EC	10	30162EC	150	30963EC	390	29663EC	1.0k	30314EC	2.2k	31237EC	5.1k	30453EC	22k	30525EC	220k
31106EC	47	30470EC	220	31165EC	470	29735EC	1.2k	30390EC	2.7k	31270EC	5.6k	30841EC	33k	31202EC	470
29946EC	100	30605EC	270	31376EC	560	29760EC	1.5k	30672EC	3.3k	29911EC	10k	31149EC	47k	29698EC	1.0M
30082EC	120	30867EC	330	31499EC	680	30277EC	2.0k	31026EC	4.7k	30146EC	15k	29997EC	100k	29938EC	10M

Carbon Film Resistors

Any 1/8 or 1/2-Watt Resistor value (below) can be special ordered – 1000 pc minimum
• 1/8-W – \$12.95/k (bulk) • 1/2-W – \$15.95/k (bulk)

1/8-Watt Carbon Film Resistor (±5%) Assortments

1/8 & 1/2-Watt Resistor Assortments Value Chart (Ohms)

10 X	150 X	330 X	680 X	2.0k X	3.3k X	5.6k X	15k X	33k X	470k X
47 X	220 #	390 X	1.0k #	2.2k X	4.7k #	6.8k X	22k X	47k X	1.0M X
100 #	270 X	470 X	1.5k X	2.7k X	5.1k X	10k #	27k X	100k #	10M X

(X), (#) symbols indicate Resistor values included in Assortments below.

Part No.	Cross Ref. No.	Values included	Description (see chart above)	Pricing	
				1	10
108302EC	ASST1830	X #	10 each of 24 values marked by X and 50 each of 6 values marked above by # (540 pcs.)	\$12.95	\$11.49
108329EC	CAB182R	—	1/8-watt resistor component cabinet kit – 30 values (540 pcs.) see page 29	24.95	22.49

SALE

1/2-Watt Carbon Film Resistor (±5%) Assortments

Part No.	Cross Ref. No.	Values Included	Description (see chart above)	Pricing	
				1	10
107879EC	CAB12R	—	1/2-watt resistor component cabinet kit – 30 values (540 pcs.) see page 29	\$29.95	\$26.95

SMD Resistor Assortment (±5%)

144 Values, 50 pcs. each; 7,200 Pieces Total



- Surface mount 0805 resistors, 144 values ranging from 1.2Ω to 10MΩ (50 pieces of each value)
- Thickness: 0.5mm
- Size: 2.0mm x 1.25mm
- Max. overload voltage: 200V
- Op. temp.: -50°C to 120°C

Includes: Case w/ labels

Part No.	Mfr. Cross Ref. No.	1	10	25
172806EC	16-500	\$79.95	\$71.95	\$64.79

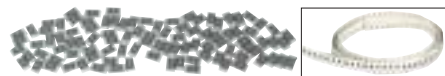
♦ Surface mount

Resistance Value Chart:

1.2	33	430	4.3k	51k	620k
1.6	39	470	4.7k	56k	750k
2.2	43	510	5.6k	62k	820k
2.4	47	560	6.2k	68k	910k
2.7	51	620	6.8k	75k	1.0M
3.0	56	680	7.5k	82k	1.6M
3.3	62	750	8.2k	91k	1.8M
4.3	68	820	9.1k	100k	2.0M
4.7	75	910	10k	110k	2.2M
5.1	85	1.0k	11k	120k	2.4M
5.6	91	1.1k	12k	150k	2.7M
6.2	110	1.2k	13k	160k	3.0M
6.8	120	1.3k	15k	180k	3.3M
7.5	130	1.5k	16k	200k	3.6M
8.2	150	1.6k	18k	220k	3.9M
9.1	160	1.8k	20k	240k	4.3M
10	180	2.0k	22k	270k	4.7M
16	200	2.2k	24k	300k	5.1M
18	220	2.4k	27k	360k	5.6M
20	240	2.7k	30k	390k	6.8M
22	270	3.0k	33k	430k	7.5M
24	300	3.3k	36k	470k	8.2M
27	360	3.6k	39k	510k	9.1M
30	390	3.9k	43k	560k	10M

SMD Resistor Assortment (±1%)

56 Values, 200 pcs. each; 11,200 pcs. Total



Packaged in strips of 200 pieces each

Surface mount 1206 Series resistors, 56 values ranging from 10 to 1MΩ – see chart.

- Max. working voltage: 200V
- Max. overload voltage: 400V
- Power @ 70°C: 1/8W
- Op. temp.: -55°C to +125°C
- Temp. coefficient: ±100 ppm/°C
- 4-digit indication: 1st 3 significant, 4th multiplier

Part No.	Mfr. Cross Ref. No.	1	10	25
156881EC	SMR1206SB	\$99.99	\$89.99	\$79.99

♦ Surface mount

Assortment Pricing: 1/4-Watt Carbon Film Resistor (±5%)

Assortments may not be combined for quantity price breaks

Part No.	Description (Including bulk pack values)	1	10	25
10719EC	5 ea. of 70 values (every other value from 10 ohm-5.6 MΩ) (350 pcs.)	\$9.95	\$8.95	\$7.95
103165EC	10 ea. of 24 values marked (●) and 50 ea. of 6 values marked (X) (540 pcs.)	12.95	11.49	9.95
10663EC	100 ea. of 27 values marked (▲) (2,700 pcs.)	24.95	22.49	20.49
10655EC	100 ea. of 160 values (all resistor values in the chart below) (16,000 pcs.)	119.95	107.95	96.95
81832EC	1/4 watt resistor component cabinet kit – 30 values (540 pcs.) see page 29	27.95	24.95	22.49

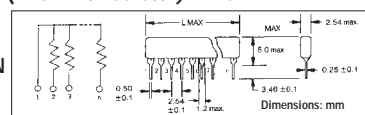
Resistor Networks

Single-In-Line "SIP" Resistor Networks

8 and 10-Pin Bussed (125mW/Resistor) ±2%

Features (8BRN/10BRN):

- 8-pin package (7 resistors) = 8BRN
- 10-pin package (9 resistors) = 10BRN
- Rated power per resistor at 70°C: 125mW/resistor
- Op. temp. range: -55°C to +125°C
- Insulation resistance: 10,000MΩ min. at 100V
- Solderability: per MIL-R-83401
- Low profile 5mm (.200" body height)
- Low profile is compatible with DIPs
- Cermet thick film construction



* 10 piece minimum

Pricing per each			
1	10	100	1000
* \$.26	\$.22	\$.16	
Pricing for P/N 97826			
* \$.22	\$.19	\$.13	

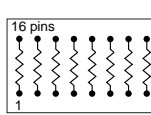
Part No.	Pins	Ohms
97826EC	8	10k
97851EC	10	330
97869EC	10	470
97877EC	10	1.0k
97893EC	10	2.2k
24660EC	10	4.7k
24643EC	10	10k
98087EC	10	47k
98095EC	10	100k

Dual-In-Line "DIP" Resistor Networks

16-Pin Isolated (140mW/Resistor) ±2%

Features (16IRN):

- Maximum operating voltage: 100V
- Insulation resistance: 10,000MΩ min.
- Lead solderability/solvent resistance: meets requirements of MIL-R-83401
- Power rating at 70°C: 2.25 watts
- Compatible with automatic insertion equipment
- Copper leads for excellent heat dissipation
- Tolerance: ±2%



Part No.	Ohms
164005EC	33
108556EC	100
108564EC	220
108572EC	330
108581EC	470
108599EC	1.0k
108610EC	4.7k
108628EC	10k
108644EC	100k

SMD Plastic Fliptop Case

Store 128 Different Surface Mount Components

- Perfect solution for storing P/N 156881 SMD resistor assortment, left
- 8 rows x 16 column grid
- Fliptop openings on each bin
- Color: gray
- Padded cover locks bins closed
- Size: 11.0"L x 8.3"W x 1.7"Thick

Includes: Labels for each bin

Part No.	Description	1	10
164267EC	SMD fliptop case ♦	\$47.99	\$43.19

♦ Surface mount

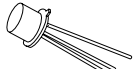
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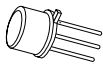


Call for pricing on quantities over 5000 – we carry major manufacturers.

Any transistor may be supplied in ammo style tape by special order – 1000 piece min.



TO-18 Case



TO-39 Case



TO-92 Case



TO-220 Case



* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No.	Case	Description	V _{ceo}	Min. h _{FE} @ I _c	Min. f _t (MHz)	NTE/ECG No.	Pricing			
								1	10	100	1000
33064EC	TIP32A	TO-220	PNP power transistor	60	10 @ 3A	0.5	292	\$.49	\$.44	\$.39	\$.36
38228EC	2N2219A	TO-39	NPN general purpose	40	100 @ 150mA	300	128	.59	.49	.45	.39
28628EC	PN2222	TO-92	NPN general purpose	30	100 @ 150mA	250	123AP	*.045	.027	.025	
38236EC	2N2222A	TO-18	NPN general purpose	40	100 @ 150mA	250	123A	.39	.35	.29	.25
28644EC	PN2907	TO-92	PNP general purpose	40	100 @ 150mA	200	159	*.13	.12	.11	
38279EC	2N2907A	TO-18	PNP general purpose	60	100 @ 150mA	200	129P	.36	.34	.31	.25
25831EC	MJE2955T	TO-220	PNP power transistor	60	20 @ 4A	2	332	.59	.47	.35	.29
25857EC	MJE3055T	TO-220	NPN power transistor	60	20 @ 4A	2	331	.57	.51	.45	.40
38359EC	2N3904	TO-92	NPN general purpose	40	100 @ 10mA	300	123AP	*.08	.06	.045	

Small-Signal High-Voltage

Part No.	Product No.	Case	Desc.	V _{ceo}	Min. h _{FE} @I _c (mA)	1	10	100	1000
178546EC	MPSA42	TO-92	NPN	300	40 @ 10	\$.22	\$.19	\$.15	\$.12

Power

Part No.	Product No.	Case	Desc.	V _{ceo}	Min. h _{FE} @I _c	1	10	100	1000
179354EC	TIP31C-SAM	TO-220	NPN	100	10 @ 3A	\$.49	\$.45	\$.39	\$.35
179371EC	TIP41C-SAM	TO-220	NPN	100	15 @ 3A	.65	.53	.45	.39
179389EC	TIP42C-SAM	TO-220	PNP	-100	15 @ 3A	.55	.50	.45	.40

Small-Signal General-Purpose

Prepackaged: order in increments of 10, 100 or 1000

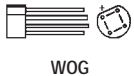
Part No.	Product No.	Case	Desc.	V _{ceo}	Min. h _{FE} @I _c (mA)	1	10	100	1000
178511EC	PN2222A	TO-92	NPN	40	100 @ 150	\$.09	\$.06	\$.04	
178520EC	PN2907A	TO-92	PNP	-60	100 @ 150	.09	.06	.04	
38375EC	2N3906	TO-92	PNP	40	100 @ 10	.07	.05	.045	

N-Channel MOSFETs

* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Case	Drain Source Brkdn Vltg.	Min. On-State DS Current	1	10	100	1000
178669EC	2N7000-FSC	TO-92	60VDC	0.2A	*.12	\$.11	\$.10	
184719EC	IRF840	TO-220	500VDC	8.0A	1.49	1.29	.99	.89

Rectifiers, Triacs, SCRs and Diodes



WOG



4-Pin DIP Case



4-lead Molded Case

KBP type



179-01 Case



TO-126 Case



TO-220/AB



DO-27A/DO-41/DO-35

Full Wave Bridge Rectifiers

Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	Pricing			
					1	10	100	1000
103018EC	W02G	—	WO type	200 PRV, 1A	\$.32	\$.30	\$.22	\$.19
103042EC	DF02M	5332	4-pin DIP	200 PRV, 1A	.31	.27	.21	.18
103034EC	DF06M	5332	4-pin DIP	600 PRV, 1A	.35	.29	.23	.19
145429EC	KBP02M	—	KBP type	200 PRV, 1.5A	.49	.44	.39	.29
25574EC	MDA990-3	5322	179-01	200 PRV, 30A	4.49	3.99	3.39	2.89

Triacs

Part Number	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	1	10	100	1000
140425EC	2N6071A	5603	TO-225AA	200 V _{DRM} , 4A	\$.69	\$.59	\$.49	\$.45
31819EC	SC146B	5633	TO-220	200 V _{DRM} , 10A (2N6342)	1.69	1.52	1.37	1.23

Rectifiers

Prepackaged: order in increments of 10, 100 or 1000

Part No.	Product No.	Case	Description	10	100	1000
35975EC	1N4001	DO-41	50 PRV, 1A	\$.03	\$.025	\$.02
76961EC	1N4002	DO-41	100 PRV, 1A	.03	.025	.02
76970EC	1N4003	DO-41	200 PRV, 1A	.04	.025	.02
35991EC	1N4004	DO-41	400 PRV, 1A	.04	.025	.02

Silicon Rectifiers

* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	1	10	100	1000
35975EC	1N4001	116	DO-41	50 PRV, 1A	*.03	\$.025	\$.02	
35991EC	1N4004	116	DO-41	400 PRV, 1A	*.04	.025	.02	
36011EC	1N4007	125	DO-41	1000 PRV, 1A	*.04	.03	.025	
36265EC	1N5404	5804	DO-27A	400 PRV, 3A	*.11	.07	.055	
36273EC	1N5408	5809	DO-27A	1000 PRV, 3A	*.15	.11	.08	

Zener Diodes

Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	10	100	500	1000
36089EC	1N4732	5096	DO-41	4.7V @ 53mA 1 W	\$.09	\$.06	\$.05	\$.04
36097EC	1N4733	135A	DO-41	5.1V @ 49mA 1 W	.09	.06	.05	.04
36118EC	1N4734	136A	DO-41	5.6V @ 45mA 1 W	.09	.06	.05	.04
36126EC	1N4735	137A	DO-41	6.2V @ 41mA 1 W	.09	.06	.05	.04
36169EC	1N4742	142A	DO-41	12.0V @ 21mA 1 W	.09	.06	.05	.04

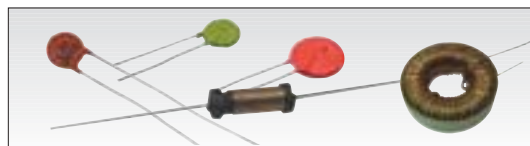
Switching Diodes

* Prepackaged: order in increments of 10, 100 or 1000

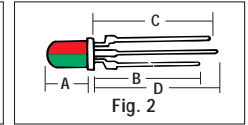
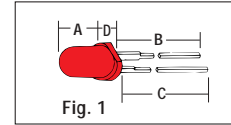
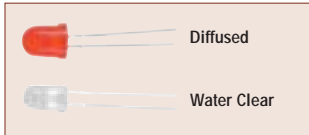
Part No.	Mfr. Cross Ref. No.	NTE/ECG	Case	Description	1	10	100	1000
35967EC	1N3600	519	DO-35	50 PRV @ 100µA, 200mA	*.12	\$.10	\$.08	
36038EC	1N4148	519	DO-35	75 PRV @ 50µA, 10mA	*.04	.03	.025	

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**Standard-Output LEDs****SALE**

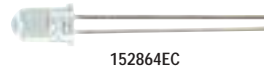
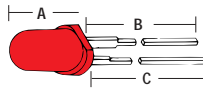
* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Mfr. Cross Ref. No.	Fig.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
							A	B	C	D					1	10	100	1000
137411EC	LVB2040	1	Blue	Blue diffused	T1	.119/3	0.21	0.98	1.03	0.04	0.10	5.5 @ 20	7.0 @ 20	430	\$2.49	\$2.25	\$1.95	\$1.69
34622EC	LR2040	1	Orange Red	Red diffused (XC209R)	T1	.119/3	0.14	1.09	1.14	0.04	0.09	2.0 @ 20	1.5 @ 10	655	*	.15	.13	.095
94529EC	LH2040	1	Red	Red diffused (XC209RB)	T1	.119/3	0.18	1.04	1.13	0.03	0.07	2.0 @ 20	2.7 @ 20	700	*	.19	.15	.12
138691EC	LVB3330	1	Blue	Blue diffused	T1 3/4	.197/5	0.34	0.98	1.03	0.06	0.08	5.5 @ 20	10 @ 20	430	2.49	2.25	1.95	1.75
134332EC	LT18B3-81UR	1	Blue	Water clear	T1 3/4	.197/5	0.30	0.93	1.00	0.04	0.10	5.0 @ 20	630 @ 20	428	2.65	2.45	2.25	1.95
34761EC	LG3330	1	Green	Green diffused (XC556G)	T1 3/4	.197/5	0.31	0.79	0.88	0.04	0.09	2.8 @ 20	12 @ 10	565	*	.15	.14	.10
94511EC	LH3330	1	Red	Red diffused (XC556RB)	T1 3/4	.197/5	0.31	0.81	0.86	0.04	0.08	2.8 @ 10	4.0 @ 10	697	*	.17	.13	.10
34673EC	LHG3392	2	Red/Green	White diff. bi-color/tri-state ¹	T1 3/4	.197/5	0.30	1.02	1.05	1.12	0.03	2.8 @ 20	3 & 12 @ 10	697/565	.29	.25	.19	.15

¹ Reverse polarity to change color**LEDTECH LEDs**

• Typical DC forward current 20mA

Ledtech is a QS9000 and ISO-9000 Certified Company

SALE

* Prepackaged: order in increments of 10, 100 or 1000

Part Number	Product Number	Emitting Color	Lens/Feature Description	LED Size	Dia. (inch/mm)	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
						A	B	C	D					1	10	100	1000
152768EC	LT0324-41	Green	Green clear	T1	.119/3	0.20	0.89	0.95	—	0.10	2.1 @ 20	20 @ 20	567	*	\$.17	\$.14	\$.11
152750EC	LT0344R-41	Orange Red	Red clear	T1	.119/3	0.20	0.89	0.95	—	0.10	2.1 @ 20	23.5 @ 10	635	*	.19	.16	.12
152864EC	LT1873-81	Red Super Brt.	Water clear	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.7 @ 20	1000 @ 20	660	.29	.24	.19	.15
152805EC	LT1873-81-UR	Red Ultra Brt.	Water clear	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.9 @ 20	2000 @ 20	660	.29	.25	.19	.15
156970EC	LT1873-UR-C07	Red Ultra Brt.	Water clear (wide angle)	T1 3/4	.197/5	0.34	0.89	0.95	—	0.10	1.9 @ 20	2112 @ 20	660	.35	.31	.25	.19

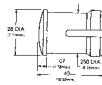
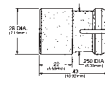
LED Mounting Hardware

Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Description	Color	Mounting Hole Dia.	Panel Thickness	Pricing		
						10	100	1000
95513EC	LMH100	T1 snap-in	Black	.185"	Up to .070"	\$.08	\$.07	\$.04
23077EC	LMH200	T1 1/4 ring & clip	Black	.257"	Up to .125"	.15	.135	.12
95521EC	LMH250	Rect. snap-in	Black	.306" x .202"	Up to .092"	.20	.18	.16

**T1 3/4 Cliplite® LED Lens Mount**

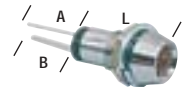
- Requires no assembly tools, just snap in
- Material: lens – polycarbonate; spacer – nylon
- Increases viewing angle to 180°
- Devices mount on .375" centers
- Helps guard against electrostatic discharge up to 16kV while affording the LED physical protection



Part No.	Product No.	Description	Color	Fig.	Mounting Hole Dia.	Panel Thickness	Pricing			
							1	10	100	1000
14277EC	CLF280CTP	T1 3/4	Clear	1	.25"	.063" – .125"	\$.24	\$.21	\$.18	\$.15
29612EC	CLF280RTP	T1 3/4	Red	1	.25"	.063" – .125"	.25	.22	.19	.17
124927EC	CLB300CTP	T1 3/4	Clear	2	.25"	.031" – .25"	.24	.21	.18	.15

Panel Mount LED Indicators

- Easy panel installation
- Panel/status/instrument indicators
- Vf @ If: 2V @ 20mA
- Color: red
- Chrome housing



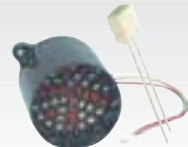
141129EC: LED size: T1 • Mounting hole: .24"

141137EC: LED size: T1 3/4 • Mounting hole: .31"

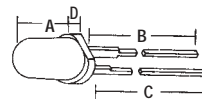
Part No.	Mfr. Cross Ref. No.	Dimensions (in.)			Pricing		
		L	A	B	1	10	100
141129EC	L913RD	.56	.39	.32	\$1.09	\$.85	\$.79
141137EC	L917RD	.70	.55	.47	.89	.79	.71

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**Infrared Emitters**

- Use for remote control and/or for fiber optics
- P/N 133946EC: Can be used with cameras, see pg 63 (peak emission wavelength: 940nm @ If 20mA)

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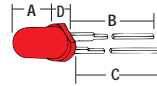
Part No.	Mfr. Cross Ref. No.	Description	Size	Diameter inch/mm	Dimensions (Inches)				Vf @ If	nm	mWatts	Pricing			
					A	B	C	D				1	10	100	1000
106526EC	TLN110	Infrared emitter diode (GaAs)	T1 3/4	0.200/5	0.34	0.78	0.84	0.04	1.2V @ 20mA	940	9	\$.39	\$.29	\$.19	\$.15
133946EC	SLI-0308CP	Infrared emitter diode (GaAs)	T1	0.12/3	0.22	0.98	1.00	0.03	1.7V @ 50mA	940	200	.69	.59	.45	.35

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High-Output LEDs

- Typical DC forward current 20mA



SALE

Part No.	Mfr. Cross Reference No.	Emitting Color	Lens/Feature Description	LED Size	Diameter inch/mm	Dimensions (Inches)				Lead Spacing	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Pricing			
						A	B	C	D					1	10	100	1000
142885EC	CLP1309-U	White	Water clear	T1	.119/3	0.22	0.84	0.90	0.04	0.08	3.6 @ 20	2300 @ 20	—	\$2.89	\$2.75	\$2.59	\$2.45
131895EC	TLSH180P	Orange	Water clear	T1 3/4	.197/5	0.39	0.80	0.86	0.06	0.10	2.1 @ 20	7000 @ 20	623	2.49	2.19	1.95	1.79
215597EC	LT2K33-81-UC9T	Yellow	Water clear	T1 3/4	.197/5	0.31	0.89	0.95	0.04	0.10	2.2 @ 20	5000 @ 20	590	.59	.55	.49	.45
183214EC	MCDPG503PCI	Green	Water clear	T1 3/4	.197/5	0.30	1.04	1.09	0.04	0.08	3.5 @ 20	2200 @ 20	515	2.95	2.65	2.39	2.15
197624EC	BVU5E1BA4	Blue	Water clear	T1 3/4	.197/5	0.29	1.06	1.12	0.04	0.08	3.5 @ 20	10000 @ 20	470	3.19	2.89	2.59	2.29
183222EC	MCDL513SBC4	Blue	Water clear	T1 3/4	.197/5	0.29	1.02	1.13	0.04	0.08	5.0 @ 20	3000 @ 20	470	3.25	2.95	2.65	2.39
183231EC	T18W133196	White	Water clear	T1 3/4	.197/5	0.30	1.06	1.12	0.04	0.08	3.6 @ 20	3000 @ 20	—	2.95	2.65	2.39	2.15
142893EC	CLP1509	White	Water clear	T1 3/4	.197/5	0.34	0.79	0.88	0.04	0.08	3.6 @ 20	3700 @ 20	—	3.95	3.59	2.95	2.75

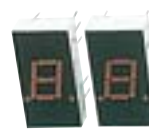
LED Displays

The general advantages of LED displays compared to incandescent types include:

- Longer lifetime (averaged more than 300,000 hours)
- Lower power consumption
- Compact size suitable for instrumentation and graphic representations

Soldering:

- Soldering bath: not more than 5 seconds @ 260°C
- Soldering iron: not more than 3 seconds @ 300°C under 30W



24740EC & 24782EC



17187EC



32951EC



118906EC



7-Segment Displays

Part No.	Mfr. Cross Reference No.	Character Height	Illuminated Color	Buss Polarity*	Pins/Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing			
										1	10	100	1000
24740EC	LSD3221-11	.300"	Red	CA	11	2.1 @ 20	2.5 @ 20	697	LHDP	\$.79	\$.72	\$.64	\$.58
24782EC	LSD3211-11	.300"	Red	CC	10	2.1 @ 20	2.5 @ 20	697	RHDP	.89	.75	.65	.49
17187EC	LSD5051-11	.500"	Red	CC	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.80	.72	.65
17208EC	LSD5061-11	.500"	Red	CA	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
24715EC	LDD5121-20	.560"	Red	2-digit CA	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
97199EC	LSD23265-10	2.24"	Red	CA	10	1.7 @ 20	21 @ 20	660	RHDP	5.75	5.19	4.69	4.19
105591EC	LSD40054-20†	4.0"	Orange Red	CA	10	2.0 @ 20	18 @ 20	635	RHDP	9.49	8.29	7.49	6.49

† P/N 105591: 5 diodes per segment

SALE

Dot Matrix Displays

Part No.	Mfr. Cross Reference No.	Jameco Socket Number	Character Height	Illuminated Color	Buss Polarity*	Pins/Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing			
											1	10	100	1000
173833EC	HP5082-7300	—	.290"	Red	4x7 Numeric	8	5.0 @ 170	.03 @ 20	660	RHDP	\$7.95	\$6.39	\$4.79	\$3.39
32951EC	TIL311	37161EC	.300"	Red	4x7 Hex character	11	5.0 @ 5	0.1 @ 5	660	—	16.95	14.35	12.92	11.62
118906EC	LTP747R	37161EC	.680"	Orange Red	5 x 7 AC/CR	12	1.7 @ 20	0.2 @ 20	655	—	1.95	1.55	1.17	.82
183265EC	LMD5821ASR-20	—	2.3"	Red	5 x 8 CC/AR	14	1.7 @ 20	12 @ 20	660	—	4.95	4.49	3.95	3.49

* CA-Common Anode/CC-Common Cathode/AC-Anode Column/CR-Cathode Row/AR-Anode Row # LHDP-Left Hand Decimal Point / RHDP-Right Hand Decimal Point

CDS Photocells

- Generate variable signal based on detection of light levels
- Operating temperature: -30°C to +70°C
- Applications: auto-focus lenses, exposure meters, contrast controls for TVs, dimmer or light switches, flame detectors, electronic toys, street lamp switches, optocouplers
- Soldering: 230°C for 3 seconds
- Cadmium Sulfide (CDS)

Part No.	Mfr. Cross Ref. No.	Rating		Resistance (Ω)		Size (Inches)		Lead Spacing (Inches)	Lead Length (Inches)	Pricing			
		Vp	mW	Dark	Light	A	B			1	10	100	1000
120299EC	136063EC	20	40	100k	10k	0.14	0.17	0.10	1.50	\$6.69	\$6.62	\$5.55	\$4.49
	120299EC	350	400	300k	8k	0.38	0.43	0.30	1.44	1.79	1.59	1.45	1.29

LCD Modules

Scott Edwards Electronics, Inc.

Serial LCD Modules

Includes instruction codes for character gen., cursor control, printing, etc. Examples for Stamps in PBASIC included.

Ideal for use w/ BASIC Stamps (pg 66), 80C52-BASIC controllers (pg 11) and PCs!

16 characters x 2 lines Integrated Display

- Terminal style 1200-9600bps
- serial input with 16-byte input buffer
- EEPROM storage of settings, six custom characters, and a splash screen
- Serial control of the standard LED backlight
- Low current draw: 5mA (backlight off) to 40mA (backlight on and bright)
- Power requirement: 4.8 – 5.5VDC @ 5mA (recommend P/N 164101EC, pg 27)

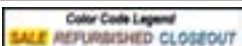


16 characters x 2 lines LCD Serial Backpack®

- High-contrast supertwist display
- Serial "backpack" accepts RS-232, or inverted CMOS, TTL at 2400 or 9600bps
- Power requirement: 4.8 – 5.5VDC @ 3mA (recommend P/N 164101EC, pg 27)
- Connector: 5-pin header (recommend P/N 163686EC, see web)



Part No.	Description	Module Size (LxWxT)	1	10	25	Part No.	Description	Module Size (LxWxT)	1	10	25
150990EC	LCD module	3.2" x 2.0" x 0.5"	\$48.95	\$44.09	\$39.65	133129EC	LCD module	3.1" x 1.4" x 0.7"	\$59.95	\$53.99	\$48.99



Order 24/7 Toll Free 1-800-455-6119



Point Six 16 x 4 Parallel LCD Module

- 16 x 4 character display (.78"H)
- Character font: 5 x 8 dots
- Input data: 4-bit or 8-bit interface available
- Display size: 2.4"L x 1.0"W x 0.06"T

Requires: 4.5V @ 2mA wall transformer (recommend P/N 164101EC, pg 27)

Part No.	Description	Module Size (LxWxT)	1	10	25
151933EC	16 x 4 parallel LCD	3.4" x 2.4" x .25"	\$24.95	\$22.49	\$19.95

Serial LCD Interface Module*For Parallel LCD Displays with Hitachi 44780 Chipset*

- Supports 1 x 8 thru 4 x 20 LCD display formats
- Provides word wrap, control character processing for display blanking, cursor blanking, up-down-left-right cursor controls
- Compatible with P/Ns 151933EC (above) and 171715EC (right)

Part No.	Description	Size (LxW)	1	10	25
157981EC	LCD serial module	1.5" x 1.0"	\$22.95	\$20.95	\$18.95

0.6" High 3½-Digit LCD Digital Panel Meters

- Automatic polarity indication
- Input impedance: >100MΩ
- Input Ranges: 200mV, 20V, 200V, 500V
- Accuracy: ±0.5% • Bezel
- Dimensions: 2.7"L x 1.7"W
- Supply voltage: 9-12VDC (recommend 9V battery P/N 151095EC, pg 65)

Part No.	Description	1	10	25
175951EC	"1999" LCD DPM	\$12.95	\$11.95	\$10.95
146835EC	"1999" LCD DPM backlit display	19.95	17.99	16.19

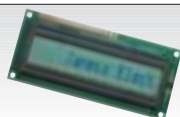
**Industrial Panel Meter****0 to 1mA DC**

- Low cost, high quality
- Basic DC accuracy to 0.3%
- DC Range: 0 – 1mA Taut Band
- Replacement for: Yokogawa, Modutech, Jewell, WPIC, Hoyt, Crompton, Brighton
- UL recognized

Part No.	Product No.	Depth	Size (LxWxH)	1	10	25
171897EC	PMG6S	1.2"	1.5" x 1.7" x 1.7"	\$14.45	\$13.05	\$11.75

More @ www.Jameco.com

See our website for our complete selection of LCD Modules and Displays.

**LCD Parallel Display****16 Characters x 2 Lines**

- 14-pin/terminals
- Controller: KS0066U or equivalent
- Character font size: 0.125"W x 0.200"H
- Max. input voltage: 5.3VDC
- 8-bit interface data bus
- Display size: 2.5"L x 0.7"W
- Operating input voltage: 5VDC (recommend P/N 164101EC, pg 27)



Part No.	Product No.	Module Size (LxWxT)	1	10	25
171715EC	AC162A	3.4" x 1.2" x 0.5"	\$19.95	\$17.95	\$15.95

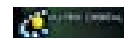
16 Characters x 2 Lines Serial LCD Module

- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping, and auto scroll feature
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using same 2 wire interface
- Backlight supply current: 40mA typical
- Display size: 2.5"L x 0.7"W
- Power requirement: 5VDC @ 9mA (recommend P/N 164101EC, pg 27)



Includes: Manual and software

Part No.	Description	Module Size (LxWxT)	1	10	25
174166EC	16 x 2 w/ interface	3.2" x 1.5" x 0.8"	\$64.95	\$58.49	\$52.65

**20 x 4 Serial LCD Modules**

- 20 characters x 4 line display with large digit mode
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature
- Backlight supply current: 90mA typical
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- Display size: 3.0"L x 1.0"W



150957EC

Includes: Manual and software

150957EC: 20 x 4 Serial LCD Module

- Power requirement: 5VDC @ 10mA typical (recommend P/N 164101EC, pg 27)



157323EC

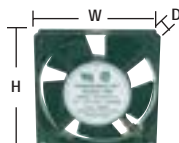
157323EC: 20x4 Serial LCD Module with keypad Interface

- Power requirements: 5VDC @ 16mA typical (recommend P/N 164101EC, pg 27)

Part No.	Description	Module Size (LxWxT)	1	10	25
150957EC	LCD module	3.9" x 2.4" x 0.7"	\$89.95	\$80.95	\$72.95
157323EC	Module w/ interface	3.7" x 2.4" x 1.1"	99.95	89.99	82.95

SALE**AC Tube Axial Fans**

124062EC



106585EC



- Rating 115 & 220VAC @ 50/60Hz
- Low acoustical noise rating
- Agency approved fans
- Ball and sleeve bearings
- Air flow from 11 to 211 CFM



16934EC



102891EC

Part Number	Manufacturer	Product Number	Voltage (VAC)	Dimensions (W" x H" x D")	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
162704EC	Toyo	USTF60301153W	115	2.36 x 2.36 x 1.18	11	Ball	38	4	UL/CSA/CE	29	12" leads	\$15.95	\$14.39	\$12.95	\$11.65
124062EC	Sunon	SP101AT1122HBT	115	4.68 x 4.68 x 1.00	78	Ball	180	18	CSA/TUV/CE	46	terminals	15.95	14.39	12.95	11.65
118965EC	Fulltech	UF12A12BTL1	115	4.68 x 4.68 x 1.50	64	Ball	80	15	UL/CSA/TUV/CE	37	terminals	14.95	13.49	12.15	10.95
106585EC	Common Wealth	FP108-1-S1/T	115	4.68 x 4.68 x 1.50	105	Sleeve	180	12	UL/CSA/CE	47	terminals	14.95	13.49	12.15	10.95
16934EC	Common Wealth	FP108-1-S1-B	115	4.68 x 4.68 x 1.50	105	Ball	200	17	UL/CSA/TUV/CE	47	terminals	16.95	15.29	13.75	12.39
102883EC	Sunon	SP100A-1123XBT	115	4.68 x 4.68 x 1.50	117	Ball	240	20	UL/CSA/TUV/CE	50	terminals	14.95	13.95	12.95	11.95
108724EC	Fulltech	UF15AC12BTH	115	6.75 x 5.90 x 1.50	211	Ball	230	28	UL/CSA/TUV/CE	58	terminals	29.95	26.95	23.95	21.49
102891EC	Sunon	DP200A-2123XBT	220	4.68 x 4.68 x 1.50	117	Ball	120	21	UL/CSA/TUV/CE	50	terminals	15.95	14.39	12.95	11.65

Straight and Right-Angle 24" Fan Cords

- Cord type: SPT-1 (2) conductor black
- Volt. rating: 300V
- Temp. range: 60°C
- Fits all terminal fans

Part No.	Description	Length	1	10	100	250
28564EC	Straight socket cord	24"	\$.89	\$.75	\$.69	\$.65
104192EC	90° angle socket cord	24"	1.19	1.09	.96	.87



28564EC



104192EC

Point Six 16 x 4 Parallel LCD Module

- 16 x 4 character display (.78"H)
- Character font: 5 x 8 dots
- Input data: 4-bit or 8-bit interface available
- Display size: 2.4"L x 1.0"W x 0.06"T

Requires: 4.5V @ 2mA wall transformer (recommend P/N 164101EC, pg 27)

Part No.	Description	Module Size (LxWxT)	1	10	25
151933EC	16 x 4 parallel LCD	3.4" x 2.4" x .25"	\$24.95	\$22.49	\$19.95

Serial LCD Interface Module*For Parallel LCD Displays with Hitachi 44780 Chipset*

- Supports 1 x 8 thru 4 x 20 LCD display formats
- Provides word wrap, control character processing for display blanking, cursor blanking, up-down-left-right cursor controls
- Compatible with P/Ns 151933EC (above) and 171715EC (right)

Part No.	Description	Size (LxW)	1	10	25
157981EC	LCD serial module	1.5" x 1.0"	\$22.95	\$20.95	\$18.95

0.6" High 3½-Digit LCD Digital Panel Meters

- Automatic polarity indication
- Input impedance: >100MΩ
- Input Ranges: 200mV, 20V, 200V, 500V
- Accuracy: ±0.5% • Bezel
- Dimensions: 2.7"L x 1.7"W
- Supply voltage: 9-12VDC (recommend 9V battery P/N 151095EC, pg 65)

Part No.	Description	1	10	25
175951EC	"1999" LCD DPM	\$12.95	\$11.95	\$10.95
146835EC	"1999" LCD DPM backlit display	19.95	17.99	16.19

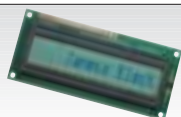
**Industrial Panel Meter****0 to 1mA DC**

- Low cost, high quality
- Basic DC accuracy to 0.3%
- DC Range: 0 – 1mA Taut Band
- Replacement for: Yokogawa, Modutech, Jewell, WPIC, Hoyt, Crompton, Brighton
- UL recognized

Part No.	Product No.	Depth	Size (LxWxH)	1	10	25
171897EC	PMG6S	1.2"	1.5" x 1.7" x 1.7"	\$14.45	\$13.05	\$11.75

More @ www.Jameco.com

See our website for our complete selection of LCD Modules and Displays.

**LCD Parallel Display****16 Characters x 2 Lines**

- 14-pin/terminals
- Controller: KS0066U or equivalent
- Character font size: 0.125"W x 0.200"H
- Max. input voltage: 5.3VDC
- 8-bit interface data bus
- Display size: 2.5"L x 0.7"W
- Operating input voltage: 5VDC (recommend P/N 164101EC, pg 27)



Part No.	Product No.	Module Size (LxWxT)	1	10	25
171715EC	AC162A	3.4" x 1.2" x 0.5"	\$19.95	\$17.95	\$15.95

16 Characters x 2 Lines Serial LCD Module

- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping, and auto scroll feature
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using same 2 wire interface
- Backlight supply current: 40mA typical
- Display size: 2.5"L x 0.7"W
- Power requirement: 5VDC @ 9mA (recommend P/N 164101EC, pg 27)

**Includes:** Manual and software

Part No.	Description	Module Size (LxWxT)	1	10	25
174166EC	16 x 2 w/ interface	3.2" x 1.5" x 0.8"	\$64.95	\$58.49	\$52.65

**20 x 4 Serial LCD Modules**

- 20 characters x 4 line display with large digit mode
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature
- Backlight supply current: 90mA typical
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- Display size: 3.0"L x 1.0"W



150957EC

Includes: Manual and software**150957EC: 20 x 4 Serial LCD Module**

- Power requirement: 5VDC @ 10mA typical (recommend P/N 164101EC, pg 27)



157323EC

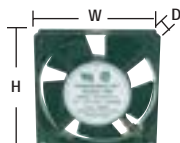
157323EC: 20x4 Serial LCD Module with keypad Interface

- Power requirements: 5VDC @ 16mA typical (recommend P/N 164101EC, pg 27)

Part No.	Description	Module Size (LxWxT)	1	10	25
150957EC	LCD module	3.9" x 2.4" x 0.7"	\$89.95	\$80.95	\$72.95
157323EC	Module w/ interface	3.7" x 2.4" x 1.1"	99.95	89.99	82.95

SALE**AC Tube Axial Fans**

124062EC



106585EC



- Rating 115 & 220VAC @ 50/60Hz
- Low acoustical noise rating
- Agency approved fans
- Ball and sleeve bearings
- Air flow from 11 to 211 CFM



16934EC



102891EC

Part Number	Manufacturer	Product Number	Voltage (VAC)	Dimensions (W" x H" x D")	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
162704EC	Toyo	USTF60301153W	115	2.36 x 2.36 x 1.18	11	Ball	38	4	UL/CSA/CE	29	12" leads	\$15.95	\$14.39	\$12.95	\$11.65
124062EC	Sunon	SP101AT1122HBT	115	4.68 x 4.68 x 1.00	78	Ball	180	18	CSA/TUV/CE	46	terminals	15.95	14.39	12.95	11.65
118965EC	Fulltech	UF12A12BTL1	115	4.68 x 4.68 x 1.50	64	Ball	80	15	UL/CSA/TUV/CE	37	terminals	14.95	13.49	12.15	10.95
106585EC	Common Wealth	FP108-1-S1/T	115	4.68 x 4.68 x 1.50	105	Sleeve	180	12	UL/CSA/CE	47	terminals	14.95	13.49	12.15	10.95
16934EC	Common Wealth	FP108-1-S1-B	115	4.68 x 4.68 x 1.50	105	Ball	200	17	UL/CSA/TUV/CE	47	terminals	16.95	15.29	13.75	12.39
102883EC	Sunon	SP100A-1123XBT	115	4.68 x 4.68 x 1.50	117	Ball	240	20	UL/CSA/TUV/CE	50	terminals	14.95	13.95	12.95	11.95
108724EC	Fulltech	UF15AC12BTH	115	6.75 x 5.90 x 1.50	211	Ball	230	28	UL/CSA/TUV/CE	58	terminals	29.95	26.95	23.95	21.49
102891EC	Sunon	DP200A-2123XBT	220	4.68 x 4.68 x 1.50	117	Ball	120	21	UL/CSA/TUV/CE	50	terminals	15.95	14.39	12.95	11.65

Straight and Right-Angle 24" Fan Cords

- Cord type: SPT-1 (2) conductor black
- Volt. rating: 300V
- Temp. range: 60°C
- Fits all terminal fans

Part No.	Description	Length	1	10	100	250
28564EC	Straight socket cord	24"	\$.89	\$.75	\$.69	\$.65
104192EC	90° angle socket cord	24"	1.19	1.09	.96	.87



28564EC



104192EC



134586EC



102955EC

Call for additional OEM PRICING – we carry major manufacturers.

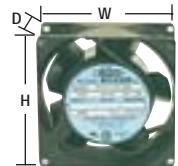
- Low profile
- Ball and sleeve bearings
- Power input by lead wires or terminals
- PBT black thermo plastic frame and impeller
- Agency approved
- Low power consumption
- Low acoustical noise rating



SALE



75467EC



102875EC

Part Number	Manufacturer	Product Number	Voltage (VDC)	Dimensions (W" x H" x D")	Air Flow (CFM)	Bearing	Current (mA)	Power (Watts)	Agency Approvals	Noise (dBA)	Connection (Leads)	Pricing			
												1	10	50	100
161699EC	Sunon	KD1204PFB2-8	12	1.60 x 1.60 x 0.40	6.3	Ball	70	0.6	UL/CSA/TUV	30	12"	\$7.95	\$6.95	\$6.25	\$5.59
213891EC	Adda	AD0412MB-D50	12	1.60 x 1.60 x 0.60	8.1	Ball	100	1.2	UL/CUL/CE	31.8	11.5"	7.95	7.19	6.45	5.85
136178EC	Adda	AD0412MS-C70	12	1.60 x 1.60 x 0.80	5	Sleeve	110	1.32	UL/CSA	23	9"	5.49	4.39	3.29	2.35
75344EC	Delta	DFB0412M	12	1.60 x 1.60 x 0.80	7.3	Ball	80	0.8	UL/CSA/VDE/CE	28	4.5"	7.69	6.95	6.25	5.65
175046EC	Globe Motors	D24-B08A-04W3-000	12	2.36 x 2.36 x 0.80	10.6	Ball	90	0.8	UL/CSA/TUV/CE	22	13"	6.95	5.59	4.19	2.95
75352EC	Common Wealth	FP108FDC12VS2	12	2.36 x 2.36 x 1.00	15.5	Sleeve	110	1.3	UL/CSA/TUV/CE	25	12"	6.95	5.59	4.19	2.95
150421EC	Jamicon	JF0625B1H	12	2.36 x 2.36 x 1.00	20.5	Ball	230	2.7	UL/CSA/TUV	30.5	10"	6.95	6.29	5.65	5.09
134586EC	Delta ¹	BFB0712H	12	2.98 x 2.98 x 1.18	11.3	Ball	360	2.6	UL/CSA/TUV/VDE	38	4"	11.95	9.59	7.19	5.05
16993EC	Various ^{2 *}	FAN7315SL	12	3.15 x 3.15 x 1.00	25-40*	Sleeve	120-200*	1-2*	UL/CSA*	25*	4-12*	6.95	6.29	5.65	4.95
75361EC	Various*	FAN6315BL	12	3.15 x 3.15 x 1.00	25-40*	Ball	120-200*	1-2*	UL/CSA*	25*	4-12*	5.95	4.79	3.59	2.55
131748EC	NMB	3110KL-04W-B10	12	3.15 x 3.15 x 1.00	25	Ball	140	1.3	UL/CSA	25	9"	7.95	6.39	4.79	3.35
154288EC	Sunon	KDE1208PTS3-6	12	3.15 x 3.15 x 1.00	29.4	Sleeve	120	1.4	UL/CSA/TUV/CE	24.5	5.5"	4.49	3.59	2.69	1.89
185826EC	NMB ³	3110KL-04W-B69	12	3.15 x 3.15 x 1.00	42	Ball	340	3.1	UL/CSA/VDE/CE	35	13*/3 leads	6.95	5.59	4.19	2.95
102955EC	Sunon	KD1208PTB1-6	12	3.15 x 3.15 x 1.00	42.5	Ball	220	2.6	UL/CSA/TUV/CE	33.5	12"	5.25	5.10	5.02	4.95
172460EC	Nidec ²	TA300DCM33406-68	12	3.15 x 3.15 x 1.00	43	Ball	290	3.5	UL/CSA	41	11*/3 leads	9.95	8.99	7.19	5.39
190983EC	Sunon	KD1209PTB1-6A	12	3.63 x 3.63 x 1.00	51	Ball	220	2.6	UL/CSA/TUV	34	12"	9.49	7.59	5.69	3.99
162739EC	NMB (Smart Fan)†	3610KL-04W-B56	12	3.63 x 3.63 x 1.00	55	Ball	430	3.8	UL/CSA/VDE/CE	37	10*/3 leads	7.95	6.39	4.79	3.35
174140EC	Common Wealth	FP108MS3	12	4.68 x 4.68 x 1.00	54	Sleeve	140	1.7	UL/CSA/TUV/CE	25	12"	6.95	5.59	4.19	2.95
75467EC	NMB	4710NL-04W-B30	12	4.68 x 4.68 x 1.00	70	Ball	320	2.9	UL/CSA/VDE/CE	34	12"	9.95	8.95	8.09	7.29
102875EC	Delta	WFB1212H	12	4.68 x 4.68 x 1.00	86.5	Ball	360	4.3	UL/CSA/TUV	37.6	12"	10.95	8.79	6.59	4.65
94625EC	Sunon	KD1212PMB1-6A	12	4.68 x 4.68 x 1.50	108	Ball	570	6.8	UL/CSA/TUV/CE	24	12"	11.95	9.59	7.19	4.99
189851EC	Delta	WFB1212HE	12	4.68 x 4.68 x 1.50	108	Ball	490	5.9	UL/CSA/VDE/CE	41.3	12"	13.95	11.19	8.39	5.89
189886EC	NMB	3610KL-05W-B30	24	3.63 x 3.63 x 1.00	40.6	Ball	87	2.1	UL/CSA/VDE	34	12"	7.95	6.39	4.79	3.35
153411EC	Sunon	KD2412PMB2-6A	24	4.68 x 4.68 x 1.50	98	Ball	230	5.5	UL/CSA/TUV	36.5	12"	12.59	11.35	10.25	9.19

¹ 134586EC: Blower type fan ² 16993EC/172460EC: Replacement for the PC/XT computer power supply fan ³ 185826EC: Speed sensor
† 162739EC: Temperature control 50°C, 3 leads * Manufacturers & specifications may vary

129 More @ www.Jameco.com/Fan

Heat Sinks, CPU Heat Sinks and Fans

TO-3 Heat Sink

- Traditional design
- Black anodized aluminum
- 4.8"L x 1.5"W x 1.3"H



Part No.	Product No.	Type	1	10	100
16512EC	DUDE4	TO-3	\$2.95	\$2.75	\$2.49

TO-3 Heat Sink

- Uses less board space
- 8 Watts
- Ideal for 0.5" centering between boards
- Spacers not included
- 1.9"L x 1.4"W x 1.3"H



Part No.	Product No.	Type	1	10	100
151546EC	635-125B2	TO-3	\$.99	\$.89	\$.67

TO-220 Heat Sink

- Black anodized aluminum
- 0.75"L c 0.52"W x 0.38"H
- 2 Watts

Thermalloy



Part No.	Product No.	Type	1	10	100
158051EC	THM6078	TO-220	\$.39	\$.35	\$.29

Heat Sink Compound

Silicone-based grease that improves transfer of energy across the metal to metal interface between transistor or rectifier to heat sink.

- Opaq. white

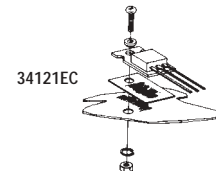


Part No.	Product No.	Weight	1	10	100
167249EC	THM250	2 oz.	\$9.95	\$8.99	\$8.09

Heat Sink Mounting Kits

- TO-3 and TO-220 heat sink insulator assemblies
- 10 kits per pack

Part No.	Type	Description	1	10	100
34121EC	TO-220	5-piece kit	\$3.95	\$3.55	\$3.19
34139EC	TO-3	12-piece kit	3.95	3.59	3.25



SALE



CPU Heat Sinks and Fans

- Excellent for avoiding CPU overheating during extended system on-time
- High efficiency cooling fans
- Easy installation – just snap it in



151298EC



206244EC



196242EC



181278EC



195784EC



118092EC



196074EC

Part No.	Description	Size (H" x W" x D")	Agency Approvals	1	10	50	100
151298EC	Heat sink w/ fan for slot 1 (SECC 1)	4.90 x 2.15 x 1.34	UL/CE/TUV	\$10.95	\$9.89	\$8.89	\$6.95
206244EC	Heat sink w/ dual fan slot (SECC 2)	5.25 x 1.95 x 1.30	CE	12.95	11.65	10.49	9.49
196242EC	Heat sink w/ fan for socket 7 (ATX)	2.26 x 2.12 x 1.07	UL/CE/TUV	9.95	8.95	7.95	6.95
181278EC	Heat sink w/ fan for socket 7 (ATX)	2.12 x 2.05 x 1.67	UL/CE/CSA	8.49	7.65	6.89	6.19
195784EC	Heat sink w/ fan for socket 7 (AT/ATX)	2.12 x 2.13 x 1.52	—	9.95	8.95	7.95	7.95
196074EC	Heat sink w/ fan for socket 7 (AT)	2.40 x 2.00 x 1.32	UL/CE/TUV	10.95	9.89	10.95	9.89
118092EC	Heat sink w/ fan for 586 CPU w/ snap	2.18 x 2.30 x 1.00	UL/CE/TUV	4.95	3.69	3.49	2.59

Order 24/7 Toll Free 1-800-455-6119

JAMECO

Color Code Legend
SALE REFURBISHED CLOSEOUT

Scott Edwards Electronics, Inc.**Mini SSC II Module
(Serial Servo Controller)**

- Controls 8 pulse-proportional servos
- Receives serially at 2400 or 9600 baud
- Module is addressable, thus allowing two units to share the same line to control a total of 16 servos
- Connections to serial input can be established using modular adapter from DB9 to RJ11 (P/N 114737EC, pg 52)
- Size (PCB): 1.9"L x 1.4"W • One-year warranty



Part No.	Description	1	10
151001EC	Serial servo controller module..	\$49.95	\$42.95

More Controllers @ www.Jameco.com

See our website for the complete selection.

Industrial Motion Controllers for Brush, Brushless and Stepper Motors

All JR Kerr Automation Engineering controllers include integrated power amplifiers. Up to 32 controllers can be daisy-chained from a single full-duplex RS-485 port. See P/N 184971EC for RS-232 to RS-485 adapter.

185009EC: • For 3-phase brushless motors with hall effect sensors or conventional DC brush-type motors

• High current amplifier: 7A continuous, 10A peak, 12 to 48VDC supply

184971EC: • Lets you operate the controllers from any standard RS-232 port

184997EC: • Integrated indexer and driver for 2 or 4 phase stepper motors

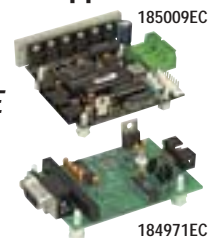
• Full/half step bipolar chopper drive, 2A per phase, 7.5 to 46VDC supply

• Trapezoidal position profiling, velocity mode, up to 50,000 steps per second

• Limit switch inputs, general purpose outputs, step/dir outputs for use with external drivers

Part No.	Description	Size (L" x W" x H")	1	10
185009EC	PIC-SERVO 3PH board for brush or brushless motors	3.1 x 3.1 x 1.0	\$239.95	\$215.95
184971EC	Z232-485 serial port adapter	3.1 x 2.1 x 0.5	59.95	53.95
184997EC	PIC-STEP motor control board	3.1 x 2.1 x 0.9	159.95	143.95

KAE

**12VDC Continuous Tubular Push and Pull Solenoids**

- 12VDC nominal voltage continuous
- Life expectancy: 2,000,000 cycles



142463EC

163803EC



Part No.	Type	Coil Res. (±10%)	Power Consum.	Holding Force (lbs. @ 20°C)	Wires (in.)	Size (ins.) (L x Dia.)	Shaft Dia. (in.)	Wt. (lbs.)	Pricing		
									1	10	100
163803EC*	Push	42.8Ω	3.4W	0.75	9.0	2.00 x .60	0.156	0.10	\$6.95	\$6.29	\$5.65
142463EC	Pull	36Ω	4.0W	0.63	2.0	1.63 x .43	0.150	0.04	5.95	5.35	4.79

* Manufactured by Guardian (A420-067074-1)

Bipolar and Unipolar Stepper Motors

- Excellent for precision control
- Can be operated in forward/reverse mode
- See website for compatible power supplies

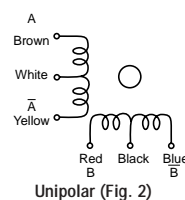
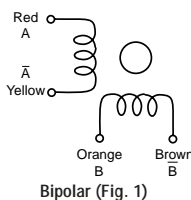
117954EC
(Fig. 1)105890EC
(Fig. 2)173180EC
(Fig. 3)213321EC
(Fig. 4)

Part Number	Mfr. Cross Ref. No.	Fig.	Step Angle	No. of Phases	Drive System	Volt. (VDC)	Phase Resis. (Ohms)	Curr. (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space Diagonal (in.)	Mounting Holes (in.)	Shaft Dia. (in.)	Shaft Length (in.)	Motor Dia. (in.)	Motor Height (in.)	Pricing		
																		1	10	50
117954EC	LB82773-M1	1	7.5°	2	Bipolar	5	6	800	7	100	1080	2.60	1.95	0.250	0.75	2.25	1.00	\$4.29	\$3.45	\$2.59
166705EC	PM42S-096	1	3.8°	4	Unipolar	12	84	140	16	60	450	1.95	0.13	0.117	0.40	1.66	1.64	3.95	2.95	2.15
105890EC	SM4200 ¹	2	3.6°	4	Unipolar	12	75	150	39	80	600	1.73	0.11	0.197	0.43	1.66	1.28	9.69	8.75	7.85
173180EC	30BY102AH ²	3	.09°	4	Unipolar	12	200	60	49.5	400	400	1.42	0.14	0.194	0.36	1.18	.68	11.49	10.35	9.35
213321EC	35BY48-27	4	7.5°	4	Unipolar	12	15	800	68	90	460	1.96	0.13	0.078	0.25	1.38	8.30	14.95	13.49	12.29

¹ 105890EC: Use P/N 161998 for shaft coupler, see website² 173180EC: Geared (7.5/Step)**GBM Bipolar and Unipolar Stepper Motors**

- Bearing type: ball
- Dielectric strength: 500V, 50Hz/minute
- 18" lead wires
- Step angle: 1.8°
- Ambient temperature: -10°C to +55°C
- Insulation resistance: 100MΩ @ 500VDC
- Use P/N 161998EC, see website for shaft coupler

GBM is an ISO-9001 Certified Company



NEMA 17 (155459EC)



NEMA 23 (162026EC)

Part Number	Product Number	Fig.	NEMA Form	No. of Phases	Drive System	Voltage (VDC)	Phase Resistance (Ohms)	Current (mA)	Phase Inductance (mH)	Detent Torque (g-cm)	Holding Torque (g-cm)	Mounting Hole Space Diagonal (in.)	Mounting Holes (in.)	Shaft Diameter (in.)	Shaft Length (in.)	Motor Diameter (in.)	Motor Height (in.)	Weight (lbs.)	Pricing		
																			1	10	50
155459EC	42BYG023*	1	17	2	Bipolar	12	30	400	36	220	2,100	1.73	0.1	0.197	0.6	1.7	1.3	0.5	\$17.95	\$16.29	\$14.59
162026EC	57BYG084	2	23	4	Unipolar	12	20	600	22	725	6,000	2.65	0.2	0.250	1.0	2.2	2.0	1.3	26.95	24.29	21.85

* Dual shaft

3-12 VDC Motors

star motor



154915EC



177498EC



181964EC

34 More Motors @ www.Jameco.com

Jameco also carries Vibrator and Geared Motors.



Part Number	Reference No.	Mfr. Cross Manufacturer	Nominal Voltage	Voltage Range (V)	Current (Amps)	RPM (max.)	Torque (g-cm)	Terminal Type	Shaft Dia.	Shaft Length	Size (D" x L")	Pricing		
												1	10	100
154915EC	ST-130-122440 ¹	Star Motor	3VDC	1.5-3	0.070	5200	4.0	0.9"/solder	0.08"	0.32"	0.79 x 1.13	\$1.25	\$1.15	\$1.05
177498EC	RC280RA-2485	Mabuchi Motor	4.5VDC	3-14	0.150	10300	33.3	11"/solder	0.08"	0.43"	0.95 x 1.20	1.75	1.55	1.39
181964EC	NF203G12	Johnson Electric	12VDC	9-14	0.030	5000	—	.07"/solder	0.08"	0.57"	0.95 x 1.20	1.49	1.15	.78

¹ Use bushing P/N 162392EC, page 67



12 VDC Reversible Gear Head Motors

- Solder-type terminal
- High torque construction
- Oil bearing design for long service life
- Insulation resistance: 10MΩ
- Dielectric strength: 300VDC



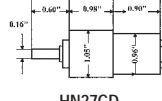
167038EC



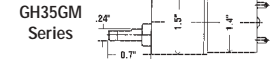
153437EC



155011EC



HN27GD Series



HN27GD Series

Part Number	Product Number	Rated Voltage	Operating Range (VDC)	No Load		Started Torque (kg-cm)	Gear Ratio	Gear Size Dia. x Lgth (in.)	Motor Size Dia. x Lgth (in.)	Shaft Size Dia. x Lgth (in.)	Pricing		
				Current (mA)	Speed (rpm)						1	10	50
167038EC	GH12-0953Y	12	4.5 - 24	45	14	1.2	188:1	1.0 x 0.9	1.1 x 1.0	.16 x .60	\$16.49	\$14.85	\$13.39

GH30GM Series

153437EC	GH12-1045Y	12	3.0 - 12	35	15	0.8	200:1	0.9 x 1.0	1.1 x 0.6	.16 x .70	\$18.95	\$17.09	\$15.35
162190EC	GH12-1324Y225	12	4.5 - 12	65	225	0.7	30:1	1.0 x 0.9	1.1 x 0.6	.16 x .70	16.95	15.25	13.75

GH35GM Series

155011EC	GH12-1926	12	4.5 - 12	55	2	15	3000:1	1.3 x 0.9	1.5 x 1.1	.23 x .90	\$21.95	\$19.79	\$17.79
155820EC	GH12-1830Y-P	12	4.5 - 12	50	4.5	13	1000:1	1.3 x 0.9	1.5 x 1.0	.23 x .90	21.95	19.79	17.79
155838EC	GH12-1641T-L	12	3.0 - 12	65	20	10	270:1	1.3 x 0.9	1.5 x 0.8	.23 x .90	21.95	19.79	17.79
152910EC	GH12-1926Y	12	4.5 - 12	48	44	11.8	100:1	1.3 x 1.0	1.5 x 0.7	.24 x .90	21.95	19.75	17.75
151440EC	GH12-1632TI	12	4.5 - 12	75	69	11	100:1	1.3 x 0.9	1.5 x 0.7	.23 x .90	21.95	18.55	16.69
161381EC	GH12-1634T	12	4.5 - 12	111	200	3.6	30:1	1.3 x 0.9	1.4 x 0.7	.23 x .90	21.95	19.79	17.79
164785EC	GH12-1640Y	12	4.5 - 24	45	300	0.8	10:1	1.3 x 0.9	1.4 x 0.7	.23 x .90	23.95	21.59	19.45

Open-Frame Switching DC Power Supplies

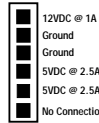
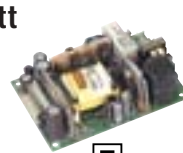
SKYNET 10-Watt

- Output voltage: +5VDC @ 2A
- Input voltage: 115/230VAC @ 50-60Hz
- Input connector: 5-position 3-pin 0.156" male locking headers
- Mating input conn.: P/N 104723EC (see web)
- Output connector: 2-position 0.156" male locking headers
- Mating output connector: P/N 176743EC (web)



SUPER MAC 24.5-Watt

- Output voltage: +5V @ 2.5A +12V @ 1A
- Input voltage: 100-240VAC @ 50-60Hz
- 2A @ 250V fuse on board
- Mating input conn.: P/N 104432EC (3-position housing connector, see web)
- Mating output connector: P/N 104731EC (6-position housing connector, pg 34)



ASTEC 60-Watt

- Output voltage: +5VDC @ 8A +12VDC @ 3.5A -12VDC @ 1A
- Input voltage: 100-240VAC @ 50-60Hz
- Input connector: 0.156" male header
- Mating input connector: P/N 104432EC (see web)
- Output connector: 0.156" male header
- Mating output connector: P/N 104731EC (pg 34)



Part No.	Product No.	1	10	50	100
184866EC	SNP-0502-B	\$10.95	\$9.95	\$8.95	\$8.95

Part No.	Product No.	1	10	50	100
166967EC	U002512010	\$12.95	\$10.99	\$8.25	\$8.25

Part No.	Product No.	1	10	50	100
180970EC	LPT62	\$23.95	\$21.59	\$19.45	\$17.45

SALE

10 to 60-Watt Switching Power Supplies

Part Number	Mfr.	Product Number	Power (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector (Mating Connector)	Output Connector (Mating Connector)	Certification	Size L" x W" x H"	Weight (lbs.)	Pricing		
											1	10	50
184866EC	Skynet	SNP-0502-B*	10	+5/2	115/230 @ 50-60	.156" M header (P/N 104723EC, see web)	.156" M header (P/N 176743EC, see web)	UL/CUL/TUV	4.4 x 1.6 x 0.8	0.2	\$10.95	\$9.95	\$8.95
166967EC	Super Mac	U002512010*	24.5	+5/2.5, +12/1	100-240 @ 50-60	.156" M header (P/N 104432EC, see web)	.156" M header (P/N 104731EC, pg 34)	UL/CSA/TUV	3.7 x 2.5 x 1.2	0.4	12.95	10.99	8.25
190086EC	Artesyn	NFS407608	40	+5.1/3, +12/2, -12/0.35	100-240 @ 50-60	.156" M header (P/N 104432EC, see web)	.156" M header (P/N 104731EC, pg 34)	UL/CSA/VDE/CE	5.0 x 3.0 x 1.2	0.5	52.95	45.25	42.55
163985EC	Samsung	PSPL430201A	43	+5/5, +12/1.5	100-120 @ 50-60	3 prong receptacle (P/N 38050EC, see pg 25)	.156" M header (P/N 42067EC, 114930EC P/N 78326EC, pg 51)	UL/CUL	6.1 x 2.1 x 1.0	0.6	14.95	11.99	8.99
169050EC	Autec	UPS50-2002	51	+5/3, +12/3	90-264 @ 47-440	.156" M header (P/N 104432EC, see web)	.156" M header (P/N 104715EC, pg 34)	UL/CSA/TUV	5.0 x 3.0 x 1.9	0.7	9.95	7.95	5.95
180970EC	Astec	LPT62*	60	+5/8, +12/3.5, -12/1	100-240 @ 50-60	.156" M header (P/N 104432EC, see web)	.156" M header (P/N 104731EC, pg 34)	UL/CSA/TUV/VDE/CE	5.0 x 3.0 x 1.6	0.8	23.95	21.59	19.45
171731EC	Delta	DPS-60MPB	60	+3.3/8, +5/9, +12/1, -12/0.2	90-270 @ 47-63	3 prong receptacle (P/N 38050EC, see pg 25)	.156" M header (12-pin housing incl.)	UL/CUL/TUV	5.8 x 3.3 x 1.4	1.0	7.95	6.39	4.79

* See photo above



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Mean Well Authorized Distributor

Mean Well is an ISO-9001 Certified Company

• High efficiency • Low output ripple • 100% burn-in • Short circuit, overload over-voltage protected • UL approved • MTBF rated • Two-year warranty

65-Watt Dual Output

- Input voltage: 90-264VAC @ 47-440Hz; 120-370VDC
- DC voltage adjustment: CH1: +10, -5%
- Mating input connector: P/N 104432EC, see web
- Mating output connector: P/N 104731EC, pg 34
- Size: 5.0"L x 3.0"W x 1.5"H



Part No.	Product No.	Watts	Output	1	10	50
194896EC	PD65B	65.5	5VDC @ 6.0A 24VDC @ 2.6A	\$34.95	\$31.49	\$23.49

65-Watt Single Output

- Input voltage: 90-264VAC @ 47-440Hz; 120-370VDC
- Mating connectors: P/N 104432EC (see web) & P/N 104731EC, pg 34
- No minimum load required
- Size: 5.0"L x 3.0"W x 1.6"H • Weight: 0.6 lbs.



Part No.	Product No.	Watts	Output	1	10	50
148638EC	PS-65-12	62.4	12VDC @ 5.2A	\$30.95	\$27.89	\$21.95

25-Watt Single Output

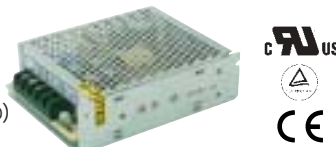
- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- No minimum load required
- Size: 3.9"L x 3.8"W x 1.4"H • Weight: 0.8 lbs.



Part No.	Product No.	Watts	Output	1	10	50
123246EC	S-25-5	25.0	5VDC @ 5.0A	\$39.95	\$35.95	\$25.49
123254EC	S-25-12	25.2	12VDC @ 2.1A	39.95	35.95	25.49
123271EC	S-25-24	26.4	24VDC @ 1.1A	39.95	35.95	25.49

40-Watt Single Output

- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- No minimum load required
- Size: 5.1"L x 3.9"W x 1.5"H
- Weight: 1.0 lb.



Part No.	Product No.	Watts	Output	1	10	50
123297EC	S-40-12	42	12VDC @ 3.5A	\$44.95	\$39.95	\$29.95

60-Watt Single Output

- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- No minimum load required
- Size: 6.3"L x 3.8"W x 1.5"H
- Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	50
123334EC	S-60-12	60	12VDC @ 5A	\$52.95	\$47.69	\$33.19
123342EC	S-60-15	60	15VDC @ 4A	52.95	47.69	33.19
123351EC	S-60-24	60	24VDC @ 2.5A	52.95	47.69	33.19

60-Watt Dual Output

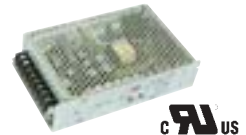
- Input voltage: 85-264VAC; 120-370VDC
- Full input range (no changes required for 110 or 220VAC operation)
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Min. load: all outputs at 10% of rated load
- Weight: 1.2 lbs.
- Size: 6.3"L x 3.8"W x 1.5"H



Part No.	Product No.	Watts	Output	1	10	50
123457EC	D-60A	56	5VDC @ 4A, 12VDC @ 3A	\$54.95	\$49.95	\$35.09
123465EC	D-60B	58	5VDC @ 3A, 24VDC @ 1.8A	54.95	49.95	35.09

60-Watt Quad Output

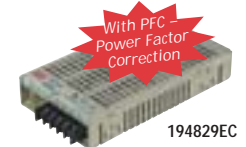
- Input voltage: 85-264VAC @ 47-63Hz; 120-370VDC
- Line regulation: 0.5%-1.0%
- Ripple and noise: 100-120mV peak to peak
- DC voltage adjustment: CH 1: +10, -5%
- Minimum load: all output at 10% rated load
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Size: 6.3"L x 3.9"W x 1.5"H • Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	50
147045EC	Q60B	60	+5VDC @ 5.5A; -5VDC @ 0.5A +12VDC @ 2A; -12VDC @ 0.5A	\$59.95	\$53.95	\$38.49

75-Watt Single Output

- Input range: 85-264VAC @ 47-63Hz; 120-370VDC
- Ripple and noise: 80mV -100mV peak to peak
- DC voltage adjustment: +10%, -5%
- Soft start-circuit, limiting AC surge current
- Line regulation: ±5%
- Mating input/output conn.: P/N 103587EC, spade terminal (see web)
- Size: 7.0"L x 3.9"W x 1.3"H • Weight: 1.2 lbs.



Part No.	Product No.	Watts	Output	1	10	50
194829EC	SP75-5	75	5VDC @ 15A	\$70.95	\$63.89	\$50.89
194837EC	SP75-12	75	12VDC @ 6.3A	70.95	63.89	50.89

120-Watt Quad Output

- Input voltage: 88-132VAC or 176-264VAC @ 47-63Hz
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Switch selectable input
- Minimum load: all outputs at 10% of rated load
- Size: 8.0" x 4.4"W x 2.0"H • Weight: 2.0 lbs.



Part No.	Product No.	Watts	Output	1	10	50
132370EC	Q-120D	124	+5VDC @ 8A; 24VDC @ 2A +12VDC @ 2A; -12VDC @ 1A	\$74.95	\$67.95	\$54.39

150-Watt Single Output

- Input voltage: 88-132VAC/176-264VAC switch selected
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Switch selectable input
- No minimum load required
- Size: 7.8"L x 4.3"W x 2.0"H • Weight: 1.8 lbs.



Part No.	Product No.	Watts	Output	1	10	50
123431EC	S-150-15	150	15VDC @ 10A	\$69.95	\$62.95	\$43.95
123449EC	S-150-24	156	24VDC @ 6.5A	69.95	62.95	43.95
167345EC	S-150-48	154	48VDC @ 3.2A	69.95	62.95	43.95

MTBF Table	Product Number	MTBF (Hours) @ Full Load/40°C	Product Number	MTBF (Hours) @ Full Load/40°C	Product Number	MTBF (Hours) @ Full Load/40°C
	PD-65	288,000	Q-60	284,000	S-240	179,000
	PS-65	300,000	SP-75	208,800	SP-300	168,000
	S-25	330,000	Q-120	261,000	S-320	188,000
	S-40	314,000	S-150	286,000	SP-500	133,000
	S-60	316,000	SP-150	191,000	PSP-500	130,000
	D-60	301,000	SP-200	183,000		

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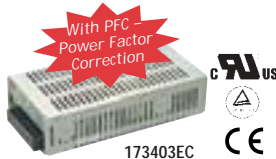
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Mean Well is an ISO-9001 Certified Company

• High efficiency • Low output ripple • 100% burn-in • Short circuit, overload over-voltage protected • UL approved • MTBF rated • Two-year warranty

150-Watt Single Output

- Input voltage: 85-264VAC @ 47-63Hz
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Overload, overvoltage & short circuit protection
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- No minimum load requirement
- 100% full load burn-in test
- Size: 7.8"L x 3.9"W x 2.0"H



Part No.	Product No.	Watts	Output	1	10	50
173411EC	SP-150-15	150	15VDC @ 10A	\$91.95	\$82.79	\$65.95
173403EC	SP-150-24	150	24VDC @ 6.5A	91.95	82.79	65.95

200-Watt Single Output

- Input voltage: 85-264VAC @ 47-63Hz; 120-370VDC
- Line regulation: $\pm 5\%$ • MTBF table, pg 22
- Ripple & noise: 100mV – 150mV peak to peak
- DC voltage adjustment: CH1: +10, -5%
- Soft-start circuit, limiting AC surge current
- Mating input/output connector: P/N 103587EC, spade terminal (see web) • Wt.: 1.9 lbs.



Part No.	Product No.	Watts	Output	1	10	50
194773EC	SP-200-12	200.4	12VDC @ 16.7A	\$102.95	\$92.69	\$73.39

240-Watt Single Output

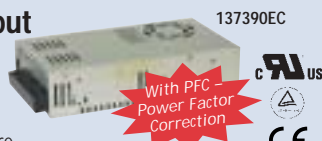
- Input voltage: 88-132VAC/176-264VAC automatic switching
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Automatic fan controls internal temperature
- Size: 8.0"L x 3.7"W x 2.6"H • Weight: 2.5 lbs. • MTBF table, pg 22



Part No.	Product No.	Watts	Output	1	10	50
137656EC	S-240-24	240	24VDC @ 10A	\$97.95	\$88.19	\$84.49

288 to 300-Watt Single Output

- Input voltage: 100 to 240VAC
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Automatic fan controls internal temperature
- Over-temperature protected
- Weight: 2.6 lbs. • MTBF table, pg 22



Part No.	Product No.	Watts	Output	1	10	50
137390EC	SP-300-12	288	12VDC @ 24A	\$175.95	\$158.39	\$115.39
137402EC	SP-300-24	300	24VDC @ 12.5A	175.95	158.39	115.39

GlobTek 150-Watt

24VDC @ 6.5 Amps

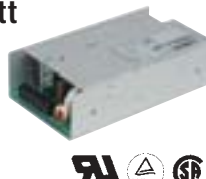
- Output voltage: +24VDC @ 6.5A
- Input voltage: 115/230VAC/50-60Hz
- 150 watts



Part No.	Product No.	1	10	50
199515EC	RT-3S150-24	\$69.95	\$62.99	\$56.69

Power One 500-Watt

- Output voltage: +48VDC @ 10.4A
- Input voltage: 85-264VAC @ 47-63Hz
- Input/output connectors: screw terminals



Part No.	Product No.	1	10	50
202913EC	141688-003	\$69.95	\$62.99	\$56.69

320-Watt Single Output

- Input voltage: 88-132VAC/176-264VAC
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Automatic on/off cooling fan
- Size: 8.5"L x 4.5"W x 2.0"H • Weight: 2.5 lbs.



Part No.	Product No.	Watts	Output	1	10	50
196656EC	S-320-24	320	24VDC @ 12.5A	\$129.95	\$116.95	\$90.89

480-Watt Single Output

- Input voltage: 100-240VAC @ 50/60Hz
- Built-in remote control
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Short circuit, overload, over voltage and over temperature protection
- Cooling fan (temperature sensing) • Remote voltage sensing
- MTBF table pg 22 • Size: 7.3"L x 4.8"W x 3.8"H • Weight: 4.2 lbs.



Part No.	Product No.	Watts	Output	1	10	50
147053EC	SP500-24	480	24VDC @ 20A	\$245.95	\$221.39	\$166.19

500-Watt Single Output

With Parallel Operation

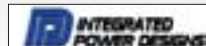
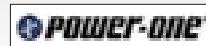
- PFC: 98% @ 115VAC; 95% @ 230VAC
- Input voltage: 90-264VAC @ 47-63Hz; 127-370VDC
- Ripple and noise: 200mV – 240mV peak to peak
- Parallel/series operation can reach 3KW
- Current sharing/remote control/remote sense
- Line regulation: $\pm 2\%$ • MTBF table pg 22
- Mating input/output connector: P/N 103587EC, spade terminal (see web)
- Size: 11.0"L x 5.0"W x 2.5"H • Weight: 5.5 lbs.



Part No.	Product No.	Watts	Output	1	10	50
190713EC	PSP-500-12	500	12VDC @ 41.5A	\$247.95	\$223.19	\$196.29
190721EC	PSP-500-48	500	48VDC @ 10.5A	247.95	223.19	196.29

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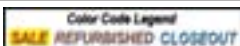
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73 and 150-Watt Switching Power Supplies

Part Number	Manufacturer	Product Number	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector/Cord	Output Connector	Certification	Size L" x W" x H"	Wt. (lbs.)	Pricing		
											1	10	50
199515EC	GlobTek	RT-3S150-24*	150	+24/6.5	115/230 @ 50-60	Screw terminal (P/N 103587EC, see web)	Screw terminal (P/N 103587EC, see web)	UL/CE	7.9 x 4.3 x 1.9	1.8	\$69.95	\$62.99	\$56.69
202913EC	Power One	PFC-500-1048*	500	+48/10.4	85-264 @ 47-63	Screw terminal (3-position)	Screw terminal (3-position)	UL/CSA/TUV/CE	9.0 x 5.0 x 2.6	3.7	69.95	62.99	56.69

* See photo above



Order 24/7 Toll Free 1-800-455-6119



276-Watt Precision Regulated Linear Power Supply

- Output current: 20A
- Illuminated rocker switch
- Short circuit protection
- Output terminals: see web for mating cigarette plugs and page 45 for mating banana terminal plugs
- Fuse protected • Output: 13.8 VDC
- Input voltage: 115VAC @ 60Hz

Includes: heavy duty 5'8" 3-prong power cord



Part No.	Model No.	Output Terminals	Size (L" x W" x H")	Wt. (lbs.)	1	10	25
138675EC	52-192012	Banana	10.0 x 7.8 x 4.4	15.9	\$109.95	\$99.95	\$89.95

**25-Watt DC-to-DC Converters**

- Input voltage: 9.2VDC-18VDC
- Built-in EMI filter, low ripple noise
- Size: 3.9"L x 3.9"W x 1.5"H • Voltage output adjustable
- Short-circuit, over voltage and overload protection
- Input/output connector: screw terminals
- Mating connectors: P/N 103587EC or P/N 103595EC, see web



175812EC

Part No.	Product No.	Output	1	10	25
175804EC	SD25A12	12V @ 2.1A	\$39.95	\$35.95	\$32.95
175812EC	SD25A24	24V @ 1.1A	39.95	35.95	32.95

**3 and 15-Watt DC-to-DC Converters**

- Short-circuit/overcurrent protection
- One-year warranty

Mean Well is an ISO-9001 Certified Company

155918EC



Fig. 1

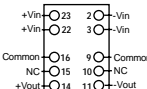
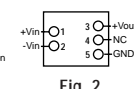


Fig. 2



Part Number	Product Number	Fig.	Power (W)	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Current (mA)	Ripple p-p (mV)	Pins	Size L" x W" x H"	Pricing		
										1	10	25
155918EC	DCW03A05	1	3	9-18	+5/-5	300	100	8	1.2 x 0.7 x 0.5	\$20.95	\$18.89	\$16.99
161701EC	DCW03A12	1	3	9-18	+12/-12	125	100	8	1.3 x 0.8 x 0.5	20.95	18.89	16.99
155707EC	SKE15A12	2	15	9-18	+12	1,250	60	4	2.0 x 2.0 x 0.4	34.95	31.19	28.15
155694EC	SKE15A24	2	15	9-18	+24	625	80	4	2.0 x 2.0 x 0.4	34.95	31.49	28.15

21 and 125 Watt DC-to-DC Converters

- Over temperature, overvoltage and short-circuit protection



109276EC



188197EC

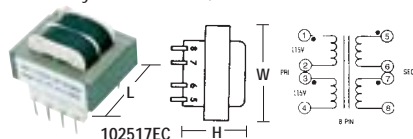

43 More Converters
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Part Number	Product Number	Power (W)	Input Voltage	Input Range (VDC)	Output Voltage (VDC)	Output Current (A)	Ripple p-p (mV)	Pins	Size L" x W" x H"	Pricing		
										1	10	50
109276EC	AA9090A	21	16	0-20	+5.1/+12.6/-26	3.75/0.1/0.04	500/100/200	32	3.6 x 1.6 x 0.8	\$6.95	\$5.59	\$4.19
188197EC	AK60C048L050F20G	125	48	36-75	15	20	150	9	2.3 x 2.4 x 0.5	19.95	17.99	16.19

Power Transformers**Split-Bobbin Power Transformers**

Non-concentrically wound with primaries and secondaries side-by-side providing low capacitive coupling.

- Primary: 115/230VAC, 50-60Hz • PC terminal pin spacing for accurate placement



102517EC

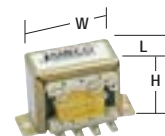
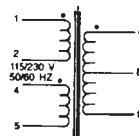
Part Number	Mfr. Cross Ref. No.	Triad Cross	Input Voltage	VA Cap	Individual Output	Parallel Output	Series Output	Dimensions			Wt. (lbs.)	Pricing	
								L"	W"	H"		1	10
102517EC	XFR1602SB*	FS16150	115/230	2.4	8V @ .15A	8V @ .30A	16VCT @ .15A	1.17	1.38	1.20	0.3	\$6.95	\$6.25
102592EC	XFR2405SB	FS24500	115/230	12.0	12V @ .50A	12V @ 1.0A	24VCT @ .50A	1.58	1.90	1.46	0.7	8.79	7.95

* Manufacturer and Product number may vary

Quick Connect Power Transformer

- Quick connect transformers are bobbin wound for smaller size and reduced electrostatic shielding requirements
- Terminals: quick connect, solder • Input voltage: 115/230VAC, 50-60Hz

Part Number	Mfr. Cross Ref. No.	Triad Cross	Input Voltage	Output Voltage	VA Cap	Size of Connect	Dimensions			Weight (lbs.)	Pricing	
							L"	W"	H"		1	10
101864EC	XFR2424Q	FD724	115/230VAC	24VCT @ 2.4A	57.6	0.187"	1.87	2.70	2.25	1.7	\$11.95	\$10.79

**115VAC and 115/230VAC Power Transformers**

Power transformers have both single and dual voltage input and center tapped outputs. This makes them the perfect choice for power supply design or for use in transformer, rectifier, and filter circuits.

- Primary: 115VAC or 115/230VAC, 50-60Hz * Center tap

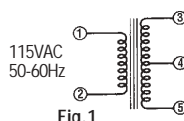


Fig. 1

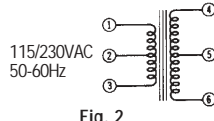


Fig. 2

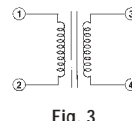
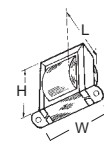


Fig. 3



29225EC

Part Number	Mfr. Cross Ref. No.	Triad Cross	Primary Color Code			VA Cap	Secondary			Lead Type	Fig.	Dimensions			Wt. (lbs.)	Pricing		
							Voltage		Color Code			L"	W"	H"		1	10	100
102162EC	XFR6102	F314X	Black	Yellow*	Red	7.6	6.3VCT @ 1.2A	White	Black* White	Wire	2	1.56	1.96	1.67	0.8	\$8.49	\$7.65	\$6.89
102111EC	XFR2410	F346X	Black	Yellow*	Red	24.0	24VCT @ 1A	White	Black* White	Wire	2	2.22	2.33	1.97	1.5	8.95	8.09	7.25
29225EC	XFR122	F44X	Yellow	—	Yellow	25.2	12.6VCT @ 2A	Blue	Red* Black	Wire	1	2.12	2.33	1.96	1.5	9.95	8.99	8.09
112512EC	XFR242N	F229X	Black	—	Black	48.0	24VAC @ 2A	White	— White	Wire	3	1.75	2.75	2.25	1.8	9.79	8.85	7.95
102120EC	XFR124	F181U	Black	—	Black	50.4	12.6VCT @ 4A	White	Black* White	Wire	1	2.53	3.08	2.61	2.7	12.95	11.69	10.49

120VAC to 120VAC Isolated Transformer

300VA

- Input voltage: 120VAC @ 60Hz
- Input connector: 5.5" cord with 2-prong plug
- Output voltage: 120VAC @ 2.5A (isolated)
- Size: 4.2"H x 3.2"W x 4.6"D
- Weight: 7.0 lbs.



Part No.	Mfr. Cross Ref. No.	1	10	100
181315EC	ITR300	\$39.95	\$35.99	\$32.39

**More Variable Transformers
@ www.Jameco.com**

AEEC 110VAC Variable AC Transformers

- Input voltage: 110VAC @ 60 Hz
- Power: 500 and 2000VA
- Output voltage: 0 to 130VAC
- Output analog voltmeter
- Input conn.: 3-prong plug w/ 5' cord
- Output conn.: 3-prong outlet type
- Lighted on/off power switch
- 169640EC: • 5A @ 250V fuse
- Size: 8.3"L x 6.5"W x 7.0"H
- Weight: 15.6 lbs.
- 169658EC: • 20A @ 250V fuse
- Size: 9.8"L x 8.0"W x 7.0"H
- Weight: 26.5 lbs.



Part No.	Description	1	10	50
169640EC	500VA transformer	\$74.95	\$67.49	\$60.75
169658EC	2000VA transformer	124.95	112.49	101.25

110/220VAC Variable AC Transformers

- Input: 110VAC or 220VAC
- Power: 500-2000VA
- Output: 0-240VAC
- Banana/screw input terminals
- Universal US/European output plugs
- Lighted on/off power switch



121275EC

Part No.	Fuse	Size (L" x W" x H")	Wt. (lbs.)
121275EC	3A/250V (P/N 69438EC)	5.3 x 7.3 x 7.0	10.4
129007EC	5A/250V (P/N 10401EC)	9.4 x 6.5 x 7.7	14.8
152581EC	10A/250V (P/N 69462EC)	9.0 x 7.0 x 7.7	19.8

Part No.	Description	1	10	50
121275EC	500VA transformer.....	\$79.95	\$69.95	\$62.95
129007EC	1000VA transformer ..	149.95	134.99	121.49
152581EC	2000VA transformer..	174.95	158.45	139.95

Power Entry Filters

- Frequency: 50/60Hz



SALE

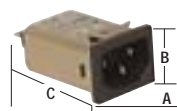


Fig. 1 (146907EC)



40601EC

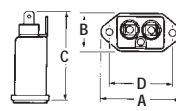


Fig. 2 (Fast-on Terminals)

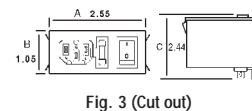


Fig. 3 (Cut out)

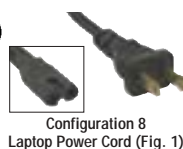
Part Number	Mfr. Cross Ref. No.	Corcom Cross	Description	Fig.	(Amps)	Current (VAC)	Voltage Terminals	Agency Approvals	Terminal Size	Dimension (inches)				Pricing			
										A	B	C	D	1	10	100	500
146907EC	03DENG3B*		Power entry filter (snap-in)	1	3	250	fast-on	UL/CSA/VDE	.25"	1.25	0.95	2.23	N/A	\$4.95	\$3.99	\$2.99	\$2.09
40601EC	03AE1*	3EF1F	Power entry filter, straight (flanged)	2	3	250	fast-on	UL/CSA/VDE	.25"	1.97	0.90	2.16	1.58	7.49	6.69	5.99	5.39
212206EC	A6-12S10E		Pwr. entry filter, fused w/switch (snap-in)	3	6	250	fast-on	UL/CSA/VDE	.25"	2.55	1.05	2.44	N/A	9.95	8.95	7.95	6.95

* Manufacturer may vary

Computer and Power Cords

- Molded connectors
- Excellent resistance to jacket abrasion
- Temperature: -20°C to +60°C
- Voltage rating: 300 volts

AWG	Volts	Amps	VA
18	125	10	1250
16	125	12	1500
14	125	15	1875



Configuration 8 Laptop Power Cord (Fig. 1)



Power Cord w/ pigtail (Fig. 2)



RFI Power Cord (Fig. 3)



Right Angle Computer Power Cord (Fig. 4)



Hospital Grade Cord (Fig. 5)

Part Number	Mfr. Cross Reference No.	Description	Weight (lbs.)	Agency Approvals	Plug Fig.	Length	Color	AWG	Cord Type*	Pricing			
										1	10	100	250
189587EC	VW-1	2-conductor "8" style power cord for laptops and power supplies	.30	UL/CSA	1	6'	Black	18/2	SPT-2	\$2.95	\$2.49	\$2.15	\$1.79
37997EC	17236	3-conductor power cord with pigtail	.30	UL/CSA	2	6'	Black	18/3	SVT	2.79	2.32	2.11	1.99
38041EC	17249	3-conductor detachable power supply cord	.37	UL/CSA	3	6'	Beige	18/3	SVT	3.49	3.15	2.79	2.49
38050EC	17250	3-conductor detachable power supply cord	.36	UL/CSA	3	6'	Black	18/3	SVT	3.75	3.25	2.75	2.49
125541EC	17504	3-conductor detachable power supply cord	.71	UL/CSA	3	6' 7"	Black	14/3	SJT	4.95	3.99	2.99	2.09
38076EC	17250R	3-conductor detachable right angle power supply cord	.54	UL/CSA	4	6'	Black	18/3	SVT	3.49	3.15	2.85	2.55
115078EC	17006	3-conductor power cord w/ hospital grade male (green dot)	.84	UL/CSA	5	10'	Black	16/3	SJT	8.95	8.09	7.25	6.55

* Thermoplastic Cord Jacket Type: Light duty: SPT-2 (Flat); Junior duty: SVT (Round); Light service: SJT (Round); Junior service

International Step-Up/Step-Down Transformers

- Wide selection to meet your power requirements



Fig. 1



Fig. 2



Fig. 3

Part Number	Mfr. Cross Ref. No. *	Fig.	Primary Voltage	Secondary Voltage	Power (VA)	Dimensions			Wt. (lbs.)	Pricing		
						H"	W"	D"		1	10	100
99573EC	AC110V50	1/A	220VAC	110VAC	50	2.50	1.63	1.33	0.7	\$8.95	\$8.09	\$7.29
85016EC	AC110V300	3/A	220VAC	110VAC	300	3.50	3.05	3.95	4.8	27.95	24.95	22.49
111851EC	AC110V500	2/A	220VAC	110VAC	500	3.99	3.60	4.84	8.5	34.95	31.49	28.95
142906EC	AC110V1500	2/A	220VAC	110VAC	1500	5.25	4.50	5.75	15.2	79.95	71.95	64.95
85008EC	AC220V300	3/B	110VAC	220VAC	300	3.50	3.05	3.95	4.8	27.95	24.95	22.49

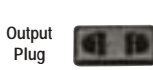
* Manufacturer may vary



Fig. A Plug



Fig. B Plug



Output Plug



43 More Power Cords @ www.Jameco.com

Look for Jameco's complete selection of
International Power Cords.





Power cords – see page 25



Stripped Female

AC/DC Table-Top Power Supplies

- Regulated and unregulated outputs (see "Output Plug")
- Input voltage: **Regulated:** 100-240VAC @ 50-60Hz
Unregulated: 120VAC @ 50-60Hz

Polarity 1 (center negative)

Polarity 2 (center positive)



136565EC



155213EC



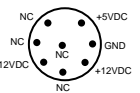
191901EC

Part Number	Mfr. Cross Reference No. ▲	Output			Output Plug ID x OD/Plug Type/Polarity	Power Indicator	Color	Size (L" x W" x H")	Cord (DC/AC)	Weight (lbs.)	Agency Approvals	Pricing		
		Volts (VDC)	Current (A)	Watts (W)								1	10	50
169121EC	AD740U1050	5	4.0	20	2.5mm x 5.5mm female 2 (regulated)	No	Black	4.1 x 2.6 x 1.6	4' 1	1.4	UL/CUL/TUV/CE	\$24.95	\$22.49	\$19.95
136565EC	DDC1210P1	12	1.0	12	Stripped & Tinned	No	Black	3.2 x 2.2 x 1.9	6' 6'	1.2	—	13.95	11.19	8.39
161576EC	MA15-120R	12	1.25	15	2.1mm x 5.5mm female 2 (regulated)	No	Black	3.3 x 2.0 x 1.3	4' 6'	0.4	UL/CSA/TUV	26.95	24.29	21.85
140880EC	DC1215ST	12	1.5	18	Stripped & Tinned	No	Black	3.1 x 2.1 x 1.9	6' 6'	1.5	UL	10.95	9.95	8.95
216531EC	KWM12F-P2MU	12	1.5	18	2.5mm x 5.5mm female 2 (regulated)	No	Black	4.0 x 1.9 x 1.5	6' 1	0.4	UL/CUL/TUV/CE	26.95	24.25	21.85
143714EC	DC1220F1	12	2.0	24	2.1mm x 5.5mm female 2	No	Black	3.8 x 2.8 x 2.3	6' 6'	2.2	—	14.95	11.99	8.99
191901EC	CUP36-12	12	2.5	30	2.5mm x 5.5mm rt angle fem 2 (regul)	No	Black	4.4 x 2.0 x 0.8	4' 2	0.7	UL/CSA/TUV/CE	27.95	24.95	22.49
155213EC	P40A-3P2JU	12	3.3	40	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.5 x 2.3 x 1.5	6' 6'	0.7	UL/CUL/TUV	34.95	31.49	27.95
155230EC	SPU50-3	12	5.0	60	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.5	6' 6'	1.3	UL/CSA/TUV	49.95	44.95	39.95
173593EC	UPS30215P*	15	2.0	30	2.5mm x 5.5mm female 2 (regulated)	Switch	Black	6.8 x 4.3 x 2.2	6' 1	1.2	UL/CSA/TUV	27.95	24.95	22.95
169076EC	808050-00	20	2.5	50	2.5mm x 5.5mm female 2 (regulated)	Yes	Black	6.7 x 3.3 x 2.3	6' 1	1.4	UL/CSA/TUV	29.95	23.95	17.95
181884EC	P40A6P2J	24	1.66	40	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	4.1 x 2.6 x 1.4	6' 6'	0.7	UL/TUV/CE	33.95	30.59	27.55
161605EC	SPU50-6	24	2.5	60	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.6	1' 9' 6'	1.3	UL/CSA/TUV	44.95	39.95	35.95
173665EC	DND-3005†	30	0.5	15	2.5mm x 5.5mm female 2 (regulated)	No	Black	8.3 x 2.5 x 2.2	5' 9' 3' 2"	1.4	UL/CUL	13.29	10.65	7.95
172064EC	SPU50-9	48	1.25	50	2.1mm x 5.5mm female 2 (regulated)	Yes	Black	5.6 x 2.9 x 1.7	6' 6'	1.3	UL/CSA/TUV	49.95	44.95	39.95

† 120VAC input only * Has on/off switch ▲ Manufacturer may vary 1 Use P/N 38050EC (pg 25) power cord 2 Use P/N 189587EC (pg 25) power cord

MOTOROLA 5.6-Watt Linear Wall Regulated DC Power Supply

- Output voltage:
+5VDC @ 500mA
+12VDC @ 130mA
-12VDC @ 130mA
- Input voltage:
120VAC @ 60Hz
- Input conn.: 3-prong AC wall plug



SALE

ELPAC 72-Watt Table-Top Switching Power Supply

- Output voltage:
+12VDC @ 6A
- Input voltage:
95-250VDC @ 47-63Hz
- Input: 6' power cord (included)
- Mating output connector: 5-pin DIN female connector, P/N 180873EC, see web

38 More @ www.Jameco.com/xfmrJameco carries a huge selection of
Table-Top Power Supplies.
See our website for more.

Part No.	Product No.	1	10	50
154624EC	5712-305-4C3E	\$11.49	\$9.19	\$6.89

Part No.	Product No.	1	10	50
182959EC	W7212	\$54.95	\$43.99	\$32.99

Part Number	Mfr. ▲	Product Number ▲	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector/Cord	Output Connector/Cord	Certification	Size L" x W" x H"	Weight (lbs.)	Type/Color	Mode†	Pricing		
													1	10	50
116089EC	Atari	C070042	5.0	+5/1	115 @ 60	2-prong/6' cord	7-pin DIN M/6'	UL	3.4 x 2.7 x 2.3	1.6	Table/Black	L	\$8.39	\$6.75	\$5.09
154624EC	Motorola*	5712-305-4C3E	5.6	+5/0.5, +12/0.13, -12/0.13	120 @ 60	3-prong wall plug	8-pin mini DIN M/6'	UL/CSA	2.9 x 2.6 x 1.9	1.2	Wall/Black	L	11.49	9.19	6.89
155651EC	Globtek	TR2V100MD8	12.2	+5/1, +12/0.3, -12/0.3	120 @ 60	3-prong/6' cord	8-pin mini DIN M/6'	UL	4.5 x 3.0 x 2.5	2.6	Table/Black	L	9.69	8.69	7.79
189843EC	ACI World	EPA201D12	20.0	+12/1.66	100-240 @ 50-60	3-prong recep./**	8-pin mini DIN M/3'4"	UL/CSA/TUV/CE	4.3 x 2.3 x 1.3	1.0	Table/Black	S	9.95	7.99	5.99
190959EC	Mean Well	P25A13D	25.7	+5/2.5, +12/0.8, -12/0.3	100-240 @ 47-63	3-prong/6' cord	5-pin DIN M/6'	CUL/TUV/CE	4.1 x 2.6 x 1.4	1.1	Table/Black	S	37.95	33.95	30.95
182959EC	Elpac*	W7212	72.0	+12/6	95-250 @ 47-63	3-prong/6' cord	5-pin DIN F/6'	UL/CSA/CE	6.2 x 3.8 x 2.6	2.5	Table/Black	S	54.95	43.99	32.99

* See photo above ** Use P/N 38050EC (pg 25) power cord † S = switching; L = linear ▲ Mfr. and Product Number may vary



101127EC



Female Male



AC to AC Wall Transformers

- Input: 120VAC @ 60Hz • Current rating up to 1.85A
- Plugs into standard 2-prong/3-prong 115V outlet
- See page 40 for wall transformer enclosures

SALE



185439EC



10102EC

Part Number	Mfr. Cross Reference No. ▲	Output Rating		Output Plug ID x OD (mm) Plug Type	Dimensions (in.) (±10%)			Output Cord Length	Weight (lbs.)	Agency Approvals	Pricing		
		Voltage	Current		H	W	D				1	10	50
101127EC	DFX10096B	7 VAC	1500 mA	2.5 mm x 5.5 mm female	1.88	2.20	1.95	7' 6"	0.8	UL/CSA	\$4.95	\$4.49	\$3.75
119204EC	A41090800	9 VAC	800 mA	2.1 mm x 5.5 mm female	2.55	1.91	1.7	6'	0.6	UL	4.49	3.59	2.69
112336EC	AC915F5	9 VAC	1500 mA	2.5 mm x 5.5 mm female	2.50	2.20	1.96	6'	0.9	UL	9.95	8.99	8.09
101258EC	41A12-500	12 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	6'	0.6	UL/CSA	4.59	4.15	3.65
10081EC	AC1210F1	12 VAC	1000 mA	2.1 mm x 5.5 mm female	2.56	2.39	1.99	6'	0.7	UL/CSA	4.95	3.99	2.99
100167EC	AC1210F5	12 VAC	1000 mA	2.5 mm x 5.5 mm female	3.20	2.41	2.00	6'	0.7	UL/CSA	4.95	4.49	3.65
171408EC	AC1405F1	14 VAC	500 mA	2.1 mm x 5.5 mm female	2.76	1.97	1.60	6'	0.6	UL/CSA	4.95	4.49	3.95
185439EC	T5182200-A020G	18 VAC	1850 mA	2.1 mm x 5.5 mm right angle female	3.34	2.69	2.19	6'	1.7	UL/CSA	7.95	7.19	6.49
87581EC	AC2405F1	24 VAC	500 mA	2.1 mm x 5.5 mm female	2.50	2.24	1.92	6'	0.9	UL/CSA	4.95	4.49	3.99
140599EC	AC2410F1	24 VAC	1000 mA	2.1 mm x 5.5 mm female	3.00	2.20	1.90	6'	1.2	UL/CSA	8.95	8.09	7.25
10102EC	AC2410M3	24 VAC	1000 mA	3.5 mm male	3.00	2.20	1.90	6'	1.2	UL/CSA	8.95	8.09	7.25
176356EC	WP573024	24 VAC	1250 mA	2.1 mm x 5.5 mm female	3.36	2.67	2.20	5'8"	1.6	UL/CSA	9.49	8.55	7.69

▲ Manufacturer may vary



AC to DC Wall Transformers

Unregulated unless specified under "output plug"

- Input: 120VAC @ 60Hz
- Current rating up to 1.5A
- Plugs into standard 2-prong/3-prong 115V outlet
- See page 40 for wall transformer enclosures



Polarity 1 (+) (center negative)

We will change any power plug (see web) on any DC wall transformer listed (100 pc. minimum)

Polarity 2 (-) (center positive)

Part Number	Mfr. Cross Reference No.*	Output Rating		Output Plug		Dimensions (in.) (±10%)			Case Color	DC Cord Length	Weight (lbs.)	Agency Approvals	Pricing		
		Volt. (VDC)	Current	ID x OD (mm)	Plug Type / Polarity	H	W	D					1	10	50
164101EC	DCR505F12	5	500 mA	2.1 mm x 5.5 mm female 2	(regulated)	2.76	2.02	1.59	Black	6'	0.6	UL/CSA	\$8.95	\$8.09	\$7.25
171301EC	JOD48U08	5	1000 mA	2.1 mm x 5.5 mm female 2	(regulated)	3.13	2.93	2.00	Black	6'	1.0	UL/CUL	9.95	8.95	7.95
168604EC	RWP480505	5	1000 mA	2.5 mm x 5.5 mm female 2	(regulated)	3.30	2.20	1.92	Black	6'	1.2	UL/CSA	11.95	10.79	9.69
101266EC	DC605F12	6	500 mA	2.1 mm x 5.5 mm female 2		2.44	1.89	1.61	Black	6'	0.4	UL/CSA	3.95	3.59	3.25
190529EC	AD9123	9	250 mA	2.5 mm x 5.5 mm rt. angle female 2 (reg)		2.47	2.02	1.60	Black	12'	0.5	UL/CSA	5.69	5.15	4.55
133891EC	DC903F1	9	300 mA	2.1 mm x 5.5 mm female 2		2.00	1.50	1.50	Black	6'	0.4	UL/CSA	3.95	3.49	3.05
140636EC	DC904F5	9	400 mA	2.5 mm x 5.5 mm female 2		2.58	2.00	2.00	Black	6'	0.6	UL/CSA	3.69	3.35	2.99
100853EC	DC905F12	9	500 mA	2.1 mm x 5.5 mm female 2		2.50	1.90	1.74	Black	6'	0.6	UL/CSA	4.49	4.05	3.65
100888EC	48-09-1000D	9	1000 mA	2.1 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	1.0	UL/CSA	7.95	6.49	5.59
129322EC	DV1220DC	12	200 mA	2.5 mm x 5.5 mm right angle female 2		2.20	1.70	1.50	Gray	6'	0.4	UL/CSA	3.69	3.35	2.95
164283EC	HD1225	12	250 mA	Stripped & tinned w/ strain relief		2.18	1.69	1.49	Gray	6'	0.4	UL/CUL	3.95	3.59	3.25
102496EC	DC1205F12	12	500 mA	2.1 mm x 5.5 mm female 2		2.50	1.90	1.57	Black	6'	0.6	UL/CSA	4.95	4.49	4.05
131300EC	SCP41	12	500 mA	2.1 mm x 5.5 mm right angle female 2		2.60	1.90	1.74	Beige	6'	0.6	UL/CSA	4.95	4.49	4.05
100870EC	DC1210F1	12	1000 mA	2.1 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	0.9	UL/CSA	7.95	6.95	6.25
170245EC	DCR1210F12	12	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)		3.20	2.26	1.97	Black	6'	1.2	—	13.95	12.59	11.35
105478EC	DC1210F5	12	1000 mA	2.5 mm x 5.5 mm female 2		2.58	2.39	1.97	Black	6'	1.0	UL/CSA	6.95	6.25	5.59
196445EC	YS1015U12	12	1250 mA	2.1 mm x 5.5 mm female 2 (regulated)		2.92	1.95	1.82	Black	5'	0.4	UL/CSA	11.95	10.79	9.75
191353EC	ADP-15FB	12	1250 mA	2.5 mm x 5.5 mm female 2 (regulated)		3.48	2.23	1.20	Black	10' (clear)	0.4	UL/CUL	16.95	13.59	10.19
101291EC	DC1215F5	12	1500 mA	2.5 mm x 5.5 mm female 2		3.40	2.70	2.20	Black	6'	1.5	UL	9.95	8.99	8.09
192786EC	MK135100	13.5	1000 mA	2.1 mm x 5.5 mm female 1		2.90	2.27	1.95	Black	6'	1.0	UL	10.95	8.79	6.59
190001EC	DC1505F1	15	500 mA	2.1 mm x 5.5 mm female 2		2.30	2.35	1.90	Black	6'	0.8	UL/CSA	6.95	6.29	5.65
155803EC	DC1506F11	15	600 mA	2.1 mm x 5.5 mm female 1		2.90	2.33	1.90	Black	6'	1.0	UL/CSA	7.95	7.19	6.45
191652EC	DC1510F12	15	1000 mA	2.1 mm x 5.5 mm female 2		3.26	2.20	1.90	Black	6'	1.0	UL/CSA	9.59	8.65	7.79
169391EC	WA15-150	15	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)		2.90	1.90	1.60	Black	6'	0.5	UL/CUL	11.95	10.38	9.08
162317EC	DC1605F1	16	500 mA	2.1 mm x 5.5 mm female 2		2.23	2.35	1.90	Black	6'	0.8	UL/CSA	7.95	6.95	6.25
168487EC	KWM020188	18	1000 mA	2.1 mm x 5.5 mm female 2 (regulated)		2.91	1.94	1.62	Black	6'	0.4	UL/CUL	16.95	15.29	13.75
102285EC	DC2404F1	24	400 mA	2.1 mm x 5.5 mm female 2		3.00	2.30	2.00	Black	6'	0.9	UL/CUL	6.95	6.29	5.65

* Manufacturer may vary

Component Grab Bags

- Use our 20-drawer cabinet with labels to store your components, P/N 81701EC, pg 40
- Opened grab bags are not returnable

Cabinet – 81701EC

Capacitors

135394EC



Wt. (lbs.) 1 10

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135394EC	GB102LB*	1.5 lb. assorted (300 pcs) electrolytic caps. radial, axial, snap (photo above)	1.5	\$12.95	\$11.49
17945EC	GB103	100 assorted tantalum capacitors (dipped epoxy and solid tubular)	0.1	9.95	8.95

Integrated Circuits

135280EC



Wt. (lbs.) 1 10

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135280EC	GB108LB*	1 lb. (400 pcs) asst. 7400, 74LS00 series (74, 74C, 74F, 74S, 74ALS, 74HC, 74HCT)	1.0	\$16.95	\$14.95
145242EC	GB109LB*	2 lb. (300 pcs) asst. linear series (LM300, 500, 700, 7800, 7900 reg.)	2.0	16.95	14.95

LEDs

18041EC



Wt. (lbs.) 1 10

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
18041EC	GB110	100 assorted sizes & colored LEDs (T1/T1 ³ / ₄ round and rectangular)	0.1	\$6.95	\$6.29
18323EC	GB186	500 asst. sizes #18041 LEDs	0.3	19.95	17.95
135271EC	GB110LB*	1 lb. (1900 pcs) asst. #18041 LEDs	1.0	44.95	40.95

1/4W Resistors

135351EC



Wt. (lbs.) 1 10

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
135351EC	GB116LB*	1 lb. (2000 pcs) asst. 1/4W resistors	1.0	\$14.95	\$13.49

* LB grab bag quantities are approximate

Hardware Assortment

- 2-56 • 4-40 • 6-32 • 8-32 • Screws
- Nuts • Washers • Steel • Brass • Lock Washers • Aluminum • Plastic

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10	25
171635EC	GB149LB*	3 lbs. (1400 pcs) assorted types of screws	3.0	\$12.95	\$11.49	\$9.95

Schwab's School Selection

A selection of Jameco's nine most popular Grab Bags, all individually bagged. North Dakota Engineer, Loren Schwab, recommended this selection of products as a standard item.

He also recommends a 20-drawer component cabinet with labels (81701EC photo above) for storage.

Includes: Ceramic and electrolytic capacitors, diodes, transistors, potentiometers, switches, LEDs, 1/4W resistors, spacers and standoffs.

Part No.	Cross Ref. No.	Description	Wt. (lbs.)	1	10
163213EC	GB197	Schwab's School Selection	3.3	\$39.95	\$34.95
81701EC	CAB20	20-drawer component cabinet	4.7	15.95	13.95

Surprise Component Grab Bag

Axial and radial electrolytics, monolithic, dipped silver mica and mylar capacitors, connectors, sockets, thermistors, LEDs, resistor networks, diodes, ICs, standoffs, transistors, oscillator/resonators, inductors, crystals, resistors, pots and switches (1075 pcs).

Part No.	Cross Ref. No.	Description	1	10	25
135263EC	GB191LB*	3 lbs. electronic components	\$17.95	\$15.95	\$13.95

* LB grab bag quantities are approximate

Kits include the Most Popular Components and a Cabinet with extra drawers for your Customized Expansion



81875EC (Capacitor Kit)

Each Kit includes a 20-Drawer Component Cabinet (81701EC), 20 clear plastic drawers (85454EC), 20 clear dividers (85446EC), 30 adhesive labels for drawers to identify parts in kit, and all the Electronic Components listed in each kit.

20-drawer component cabinet with every kit!

- Cabinet size: 6.0"L x 15.0"W x 7.9"H
- Cabinet: ABS-Black
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Weight: 4.6 to 6.4 lbs.
- Cabinet is wall-mountable or free standing

See website for refill kits www.Jameco.com

Need a refill?
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85059EC (Switch Kit)

1/2-Watt Single Turn Cermet Pot Kit

SAVE \$14

Includes 100 pcs. (10 values) 1/2-watt Linear Taper Potentiometer

10 each	10 each	10 each	10 each	10 each
63P500Ω	63P5kΩ	63P500kΩ	63P1kΩ	63P50kΩ
63P2kΩ	63P20kΩ	63P1MΩ	63P10kΩ	63P100kΩ
Part No.	Description	Wt. (lbs.)	1	10
85032EC	100 pcs. single turn Pot kit	4.9	\$65.95	\$58.95

3/4-Watt 15 Turn Cermet Pot Kit

SAVE \$24

Includes 100 pcs. (10 values) 3/4-watt Linear Taper Potentiometer

10 each	10 each	10 each	10 each	10 each
43P500Ω	43P5kΩ	43P500kΩ	43P1kΩ	43P50kΩ
43P2kΩ	43P20kΩ	43P1MΩ	43P10kΩ	43P100kΩ
Part No.	Description	Wt. (lbs.)	1	10
85041EC	100 pcs. 15 turn Pot kit	4.9	\$87.95	\$78.95

Switch Assortment Kit

SAVE \$52

Includes 150 pcs. (15 types) PB, Slide, Dip & Toggle Switches

10 each	10 each	10 each	10 each	10 each
206-4	JMT121	JMT223	MPC221	MS103
206-8	JMT123	MPC121	MPC223	SDTX620K
JMT113	JMT221	MPC123	MS102	SW153
Part No.	Description	Wt. (lbs.)	1	10
85059EC	150 pcs. Switch kit	5.0	\$98.95	\$88.95

Hardware and Spacer Assortment Kit

SAVE \$33

Includes 2300 pcs. (23 types) Spacers, Nuts, Flat, Tooth & Lock Washers and Slotted PH Screws

100 each	100 each	100 each	100 each	100 each	100 each
Spacers	Hex nuts	Flat,	Int. tooth,	Split lock	PH machine screws
—	2-56	—	—	#2	2-56 x 1/4, —
4-40	4-40	#4	#4	#4	4-40 x 1/4, 1/2
6-32	6-32	#6	#6	#6	6-32 x 1/4, 1/2
8-32	8-32	#8	#8	#8	8-32 x 1/2, —
Part No.	Description			Wt. (lbs.)	110
108433EC	2300 pcs. Hardware kit			7.5	\$59.95 \$53.95

Ceramic Disc Capacitor Kit

SAVE \$18

Includes 520 pcs. (10 values) 50v ±20% Ceramic Disc Capacitors

20 each	20 each	20 each	100 each	100 each
10pF	47pF	470pF	.022μF	.01μF
22pF	100pF	.001μF	.047μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
81859EC	520 pcs. Ceramic Capacitor kit	5.0	\$32.95	\$29.95

Monolithic Ceramic Capacitor Kit

SAVE \$6

Includes 280 pcs. (10 types) 50v ±20% Monolithic Ceramic Capacitors

10 each	10 each	10 each	10 each	100 each
22pF	.001μF	.047μF	.47μF	.01μF
100pF	.0022μF	.22μF	1μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
171475EC	280 pcs. Monolithic Cap kit	5.0	\$34.99	\$31.49

Radial Electrolytic Capacitor Kit

SAVE \$10

Includes 240 pcs. (15 values) ±20% Radial Electrolytic Capacitors

10 each	10 each	20 each	20 each	20 each
100μF @ 50v	1000μF @ 16v	1μF @ 50v	3.3μF @ 50v	22μF @ 50v
220μF @ 25v	2200μF @ 25v	1μF @ 100v	4.7μF @ 50v	47μF @ 50v
470μF @ 25v	3300μF @ 25v	2.2μF @ 50v	10μF @ 50v	100μF @ 25v
Part No.	Description	Wt. (lbs.)	1	10
81867EC	240 pcs. Radial Cap. kit	5.3	\$32.95	\$29.95

Axial Electrolytic Capacitor Kit

SAVE \$13

Includes 140 pcs. (10 values) ±20% Axial Electrolytic Capacitors

10 each	10 each	10 each	20 each	20 each
47μF @ 50v	220μF @ 50v	1000μF @ 25v	1μF @ 50v	10μF @ 50v
100μF @ 50v	470μF @ 50v	2200μF @ 16v	4.7μF @ 50v	2.2μF @ 50v
Part No.	Description	Wt. (lbs.)	1	10
81875EC	140 pcs. Axial Capacitor kit	5.3	\$39.99	\$35.99

Mylar Capacitor Kit

SAVE \$10

Includes 280 pcs. (10 values) 100v ±10% Mylar Capacitors

10 each	10 each	10 each	10 each	100 each
.001μF	.022μF	.047μF	.47μF	.01μF
.0047μF	.033μF	.22μF	1μF	.1μF
Part No.	Description	Wt. (lbs.)	1	10
81883EC	280 pcs. Mylar Capacitor kit	5.1	\$39.99	\$35.99

Dipped Tantalum Capacitor Kit

SALE

SAVE \$50

Includes 150 pcs. (15 values) ±20% Dipped Tantalum Capacitors

10 each	10 each	10 each	10 each	10 each
.1μF @ 35v	1μF @ 25v	3.3μF @ 35v	10μF @ 16v	22μF @ 16v
.22μF @ 35v	1μF @ 35v	4.7μF @ 35v	10μF @ 35v	33μF @ 25v
.47μF @ 35v	2.2μF @ 16v	6.8μF @ 35v	15μF @ 25v	47μF @ 25v
Part No.	Description	Wt. (lbs.)	1	10
81841EC	150 pcs. Tantalum Capacitor kit	4.8	\$74.95	\$67.95

Transistor Assortment Kit

SAVE \$14

Includes 560 pcs. (20 types) NPN, PNP (High/Medium/Low Power) Transistors

10 each	10 each	10 each	10 each	100 each
2N2222A	2N4401	MJE3055T	TIP31A	2N3904
2N2907A	2N4403	MPF102	TIP32A	2N3906
2N3053	2N5951	MPSA06	TIP102	PN2222
2N3055	2N7000	MPSA13	TIP120	PN2907
Part No.	Description	Wt. (lbs.)	1	10
82595EC	560 pcs. Transistor kit	5.1	\$87.95	\$78.95

7400 Series IC Kit

SAVE \$48

Includes 350 pcs. (30 types) 7400 (TTL) Integrated Circuits

10 each	10 each	10 each	10 each	10 each	20 each
7402	7416	7438	74107	74157	7400
7405	7417	7447	74123	74160	7404
7408	7420	7470	74132	74174	7406
7410	7430	7485	74151	74175	7407
7414	7432	7495	74153	74279	7474
Part No.	Description	Wt. (lbs.)		1	10
84953EC	350 pcs. 7400 IC kit	6.2		\$139.95	\$125.95

Kits include the Most Popular Components and a Cabinet with extra drawers for your Customized Expansion



81875EC (Capacitor Kit)

Each Kit includes a 20-Drawer Component Cabinet (81701EC), 20 clear plastic drawers (85454EC), 20 clear dividers (85446EC), 30 adhesive labels for drawers to identify parts in kit, and all the Electronic Components listed in each kit.

20-drawer component cabinet with every kit!

- Cabinet size: 6.0"L x 15.0"W x 7.9"H • Cabinet: ABS-Black
- Drawer size: 5.5"L x 2.7"W x 1.5"H • Weight: 4.6 to 6.4 lbs.
- Cabinet is wall-mountable or free standing

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108433EC (Hardware Kit)

74LS Series IC Kit

Includes 420 pcs. (35 types) 74LS (TTL) Integrated Circuits

SAVE \$30

10 each	10 each	10 each	10 each	20 each
74LS05	74LS73	74LS125	74LS193	74LS00
74LS10	74LS75	74LS139	74LS240	74LS02
74LS11	74LS85	74LS151	74LS244	74LS04
74LS14	74LS86	74LS155	74LS245	74LS08
74LS20	74LS90	74LS157	74LS273	74LS32
74LS30	74LS93	74LS174	74LS373	74LS74
74LS47	74LS123	74LS175	74LS374	74LS138
Part No.	Description	Wt. (lbs.)	1	10
84961EC	420 pcs. 74LS IC kit	6.7	\$119.99	\$107.99

4000 Series CMOS IC Kit

Includes 300 pcs. (25 types) CD4000 Series Integrated Circuits

SAVE \$32

10 each	10 each	10 each	10 each	20 each
CD4015	CD4024	CD4051	CD4093	CD4001
CD4016	CD4027	CD4069	CD4511	CD4011
CD4017	CD4040	CD4070	CD4538	CD4013
CD4020	CD4046	CD4071	CD4543	CD4049
CD4023	CD4050	CD4081	CD4584	CD4066
Part No.	Description	Wt. (lbs.)	1	10
84970EC	300 pcs. 4000 series CMOS IC kit	6.1	\$79.95	\$71.95

Linear Series IC Kit

Includes 480 pcs. (40 types) Linear Series Integrated Circuits

SAVE \$41

10 each	10 each	10 each	10 each	20 each
TL072CP	LM337T	LF412CN	ULN2803A	LM317T
TL074CN	LF353N	LMC555CN	NE5532	LM324N
TL082CP	LF356N	LM556N	7808T	LM339N
TL084CN	LM358N	LM723CN	78L12	LM741CN
MAX232CPE	LM386N-1	LM1458N	7815T	LM555CN
LM301N	LM386N-3	LM1488N	7905T	7805T
LM308N	LM393N	LM1489N	7912T	78L05
LM311N	LF411CN	ULN2003A	7915T	7812T
Part No.	Description	Wt. (lbs.)	1	10
84988EC	480 pcs. Linear IC kit	6.0	\$189.95	\$169.95

Grab Bag Refill Kits @ www.Jameco.com

LEDs & LED Mounting Hardware Kit

See pages 10 & 11 for photos and specs.

SAVE \$39

Includes 560 pcs. (20 types) LEDs and mounting hardware

10 each	10 each	10 each	10 each	100 each
LVG2043	HPQLMPD141	LSG2040	LG3330	LMH100
LH2043	CLF280CTP	LY2040	LY3330	LMH200
LT0333-41	LTL-425B	LA93B/G-1	LFH3360	LR2040
LG3333	LHG3392	LA93B/H-1	LEG3362	LR3330
Part No.	Description	Wt. (lbs.)	1	10
84996EC	560 pcs. LED & Hardware kit	5.0	\$59.95	\$49.95

1/8-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/8-watt 5% Resistors

SALE

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.5kΩ	3.3kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	2Ω	5.1kΩ	22kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2.2kΩ	5.6kΩ	27kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.7kΩ	6.8kΩ	33kΩ	10MΩ		
Part No.	Description			Wt. (lbs.)		1	10
108329EC	540 pcs. 1/8-watt Resistor kit			4.9	\$24.95		\$22.49

1/4-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/4-watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.2kΩ	2.7kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	1.5kΩ	3.3kΩ	20kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2kΩ	5.1kΩ	22kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.2kΩ	5.6kΩ	33kΩ	10MΩ		
Part No.	Description			Wt. (lbs.)		1	10
81832EC	540 pcs. 1/4-watt Resistor kit			4.9	\$27.95		\$24.95

1/2-Watt Carbon Film Resistor Kit

Includes 540 pcs. (30 values) 1/2-watt 5% Resistors

10 each	10 each	10 each	10 each	10 each	10 each	50 each	50 each
10Ω	330Ω	1.5kΩ	3.3kΩ	15kΩ	47kΩ	100Ω	4.7kΩ
47Ω	390Ω	2kΩ	5.1kΩ	22kΩ	470kΩ	220Ω	10kΩ
150Ω	470Ω	2.2kΩ	5.6kΩ	27kΩ	1MΩ	1kΩ	100kΩ
270Ω	680Ω	2.7kΩ	6.8kΩ	33kΩ	10MΩ		
Part No.	Description	Wt. (lbs.)				1	10
107879EC	540 pcs. 1/2-watt Resistor kit	5.1				\$29.95	\$26.95

5mm x 20mm Miniature Fuses

Fast Acting (250V) GMA Fuses

- Recommended for new designs
- Prepackaged: order in increments of 10, 100 or 1000



Part No.	Amps	Mfr.	10	100	500	1000
103886EC	250mA	Various	\$.20	\$.15	\$.11	\$.10
102040EC	500mA	Various	..20	..15	..11	..10
103907EC	1 amp	Various	...20	...15	...11	...10
103915EC	2 amp	Various	...20	...15	...11	...10
103923EC	3 amp	Various	...20	...15	...11	...10
103931EC	5 amp	Various	...20	...15	...11	...10

5mm x 20mm Miniature Low-Profile Fuse Holder

- Accepts 5 x 20mm fuses
- 10A @ 250VAC
- Size: 1.4"L x 0.6"Dia.
- D Style mounting hole: 1 ea. 0.5"Dia x .46" flat



Part No.	Description	1	10	100
102832EC	Fuse holder UL/CSA	\$1.95	\$1.79	\$1.59

54 More Fuses @
www.Jameco.com

140-Watt DC-AC Inverter



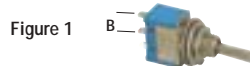
- Input voltage: 10-15VDC
- Output voltage: 110VAC @ 60Hz
- Battery low shutdown • Peak power surge capable
- Overload & high grade thermal protection
- Size: 5.5"L x 2.6"W x 1.6"H • Weight: 1.3 lbs.

SALE

Part No.	Description	1	10	25
188293EC	Cigarette plug	\$49.95	\$39.49	\$31.25

Miniature Toggle Switches

- Mounting hole diameter: 1/4"
- Includes: Mounting hardware

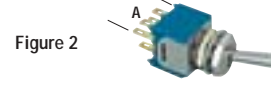


Part Number	Mfr. Cross Ref. No.	Fig.	Type Pins	Dimensions () Momentary	L" x W" x D"	Lead Spacing			Contact Rating	Lever Lead Type	Pricing Type	OEM				
						A"	B"	C"				1	10	100	250	1000
76523EC	JMT113	1	2	SPST on-off	.52 x .32 x .38	—	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	\$1.15	\$1.03	\$.93	\$.75	\$.65
21936EC	JMT123	3	3	SPDT on-on	.52 x .32 x .38	—	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.15	1.03	.93	.75	.65
22832EC	LFH123	3	3	SPDT on-on	.52 x .28 x .36	—	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Flat	1.15	1.05	.95	.85	.75
21979EC	JMT223	2	6	DPDT on-on	.52 x .52 x .38	.20	.185	—	5A @ 125VAC & 2A @ 250VAC	Solder lugs	Round	1.49	1.29	1.15	.99	.59
75900EC	SWM133	2	6	DPDT on-on	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.49	1.35	1.25	.99	.85
21952EC	JMT221	2	6	DPDT on-off-on	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.29	1.16	1.04	.89	.75
75951EC	SWM130	2	6	DPDT (on)-off-(on)	.52 x .52 x .38	.20	.185	—	6A @ 125VAC & 3A @ 250VAC	Solder lugs	Round	1.49	1.35	1.25	.99	.89
26358EC	MPC221	2	6	DPDT on-off-on	.52 x .52 x .38	.20	.185	—	5A @ 125VAC & 2A @ 250VAC	PC	Round	1.19	1.09	.86	.64	.45

Subminiature Toggle Switches

- Mounting hole diameter: 7/32"
- Pre-tinned leads
- Metal construction

Includes: Mounting hardware



Part Number	Mfr. Cross Ref. No.	Fig.	Pins	Type	Dimensions L" x W" x D"	Lead Spacing		Contact Rating	Lead Type	Lever Type	Pricing					OEM
						A"	B"				1	10	100	250	1000	
106067EC	SWP124	1	3	SPDT on-on	.25 x .33 x .40	.20	.10	30mA @ 5VDC	PC right angle	Round	\$1.99	\$1.83	\$1.59	\$1.44	\$1.32	
72160EC	SW1501	2	2	SPST on-off	.33 x .21 x .33	.10	—	1.5A @ 250VAC	Solder lugs	Round	1.29	1.24	1.14	.98	.79	
75969EC	SWM136	2	3	SPDT on-on	.33 x .21 x .33	.10	—	3A @ 125VAC	Solder lugs	Round	1.55	1.44	1.21	.86	.63	
72557EC	SW1502	2	3	SPDT on-off-on	.33 x .21 x .33	.10	—	1.5A @ 250VAC	Solder lugs	Round	1.35	1.25	.99	.75	.55	
138907EC	SW1503	2	6	DPDT on-off-on	.36 x .37 x .33	.10	—	3A @ 120VAC	Solder lugs	Round	1.29	1.05	.85	.65	.55	
75977EC	SWM137	3	6	DPDT on-on	.33 x .37 x .33	.17	.10	1.5A @ 250VAC	Solder lugs	Round	1.29	1.05	.85	.65	.55	

Pushbutton Switches

- Contact rating: 3A @ 125VAC
- 2-pins
- Lead type: solder terminal

SALE

Mountain Switch

Miniature Soft Touch Switch

Part No.	Product No.	Fig.	Type () Momentary	Dimensions	Lead Spacing	Thread Diameter	Button Color	Pricing			
								1	10	100	1000
164486EC	DS463R	1	SPST off-(on)	1.2"L x .59"Dia.	.175"	.387"	Red	\$1.64	\$1.58	\$1.47	\$1.45



Standard Touch Switch

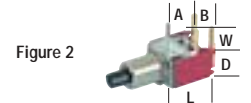
Part No.	Product No.	Fig.	Type () Momentary	Dimensions	Lead Spacing	Thread Diameter	Button Color	Pricing			
								1	10	100	1000
164582EC	DS016B	2	SPST off-(on)	.88"L x .46"Dia.	.220"	.354"	Black	\$1.49	\$1.39	\$1.25	\$1.15



Pushbutton Switches

- Pins: 2
- Normally open and closed configurations
- Momentary action pushbutton switches

Includes: Mounting hardware



Part Number	Mfr. Cross Ref. No.	Fig.	Mounting Hole Dia.	Type () Momentary	Dimensions (L" x W" x D")	Lead Spacing		Contact Rating	Terminal Type	Button Color	Pricing					OEM
						A"	B"				1	10	100	250	1000	
26622EC	MS102	1	1/4"	SPST off-(on)	.65 (D) x 1.10 (E)	—	.14	3A @ 125VAC	Solder lugs	Red	\$.55	\$.50	\$.45	\$.35	\$.29	
26649EC	MS103	1	1/4"	SPST on-(off)	.65 (D) x 1.10 (E)	—	.17	3A @ 125VAC	Solder lugs	Black	.55	.50	.45	.35	.29	
71642EC	SWB210	2	7/32"	SPST off-(on)	.33 x .36 x .20	.20	.20	1A @ 120VAC	PC right angle	Black	2.19	1.99	1.78	1.60	1.39	

Tactile Switches

- Bounce time: 10 msec.
- SPST momentary ON
- Contact resistance: 100mΩ

Part Number	Mfr. Cross Ref. No.*	Fig.	Pins	Dimensions (in.)				Lead Spacing		Contact Rating	Lead Type	Button Color	Pricing			
				L	W	D	C	A"	B"				1	10	100	250
122972EC	DTS1212	1	4	.47	.47	.18	—	.20	.50	20mA @ 15VDC	PC	Black	\$.28	\$.23	\$.20	\$.18
155379EC	KRS-1273B	2	4	.47	.47	.14	.14	.17	.53	50mA @ 12VDC	PC	Brown	.39	.35	.31	.26

*Manufacturer cross reference number and manufacturer may vary

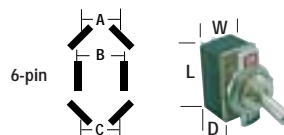


Full Size Toggle Switch

- Contact rating: 10A @ 125 VAC & 6A @ 250VAC
- Panel mount
- Full-size round lever
- Medium duty
- Lead type: screw lugs
- Mounting hole diameter: 1/2"
- Keyed plate indicates switch position
- Type: DPDT on-on

Includes: Mounting hardware and on/off plate

Part No.	Mfr. Cross Ref. No.	Dimensions	Lead Spacing (A/B/C)	1	10	100	250
158078EC	JKN3CC	1.9"L x .76"W x .73"D	.44" x .59" x .44"	\$1.75	\$1.59	\$1.29	\$.99



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See our website for our selection of Rotary and Plunger Switches.



Excell Rotary DIP Switches

- Gold plated contacts to ensure reliable, low resistance connection
- Fully sealed construction
- Terminals: PC pin leads
- Life: 10,000 cycles min.
- Material: 94V-0 grade, UL approved fire retardant plastic
- Ma. switching load rating: 25mA @ 24VDC
- Op force: 500g-cm ma.



Part No.	Product No.	Position	Adjust	Code Type	W" x D" x H"	1	10	50	100
139635EC	ERD110RS(DRD10)	10	top	BCD	0.39 x 0.39 x 0.20	\$2.65	\$2.39	\$2.13	\$1.89
139651EC	ERD116RS	16	top	Hex	0.39 x 0.20 x 0.39	2.75	2.49	2.22	1.99

Magnetic Reed Switches

SALE

- NO (normally open)
- Contact form: SPST
- Rating: 500mA @ 100VDC
- Rating: 1A @ 250VAC; 1A @ 50VDC

Part No.	Product No.	Size (length includes leads)	1	10	100	1000
171871EC	MKA141011015	1.73"L x 0.1"Dia.	\$.89	\$.65	\$.49	\$.45
164081EC	MRS1	2.35"L x 0.2"Dia.	.87	.61	.42	.38

Slotted Optical Switch

- Type N package
- Input diode: forward voltage (V_F) – 1.60V (I_F = 10mA); reverse current (I_R) – 100µA (V_R = 3.0V)
- Output phototransistor: breakdown voltage (V_{BR} CEO) = 30V min.; collector-emitter dark current (I_{CEO}) – 100nA (V_{CE} = 5V)
- Coupled: saturation voltage (V_{SAT}) – 0.40V (I_F = 10mA; I_C = 100µA) gap unblocked



Part No.	Product No.	1	10	50
189481EC	OPB660N	\$2.95	\$2.65	\$2.39

12-Button Telephone Keypads

- White plastic
- 8-pin .100" header
- Tactile type keypad
- Contact rating: 12VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 cycles per key
- Size: 2.8"L x 2.2"W x 0.6"H

153488EC



Part No.	Description	1	10	100
190561EC	Numeric keypad	\$8.75	\$6.55	\$4.49
153488EC	Alpha numeric keypad	8.95	8.09	7.25

16-Button Numeric Keypad

- 4 x 4 matrix keypad
- 8-position solder pad
- Contact rating: 24VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 life cycles per key
- Size: 3.0"L x 2.8"W x 0.6"H



Part No.	Description	1	10	100
169244EC	Numeric keypad	\$7.95	\$6.95	\$6.25

16-Button Indoor/Outdoor Keypads

- 9-pin 0.100" headers
- Fully sealed snap-dome contact
- For indoor or outdoor use
- Contact rating: 24VDC @ 10mA resistive
- Life test: 3,000,000 cycles per key
- Compatible with MOS, TTL and DTL (10Ω max.)
- Recommended connector: P/N 103190EC header and 100765EC pin
- Size (housing): 4.7"W x 1.7"H x 0.4"T



152063EC

* Prepackaged: please order in increments of 10 or 100

Part No.	Description	1	10	100
152063EC	4x4 matrix keypad	\$14.95	\$13.49	\$11.95
103190EC	Header housing (10-pin)	.42	.39	.36
100765EC	Header pin (10 per pack)	*	.11	.09

SPST Round Keylock Switch

- Used in computer & other security systems
- Key removable from 2 positions
- Voltage: 125VAC
- Current: 3A
- Two keys
- Style SPST
- Terminal: barrel
- Length: .55"
- Number flat: 2
- Diameter: .21"
- Mounting hole: 0.5"



Includes: Mounting nut

Part No.	Mfr. Cross Ref. No.	1	10	50	100
106649EC	KS4B	\$3.55	\$3.25	\$2.89	\$2.49

Rotary Switches

- Panel mount
- Make before break
- Solder lugs
- Layers: 1
- Contact rating: 30VDC @ 0.3A
- Insulation resistance: 10MΩ min.
- Contact resistance: 30mΩ
- Material: solid brass bushings, slotted aluminum shafts, plated frame, phenolic contact wafer (except for P/N 101565EC – plastic casing)
- Mounting hole diameter: 3/8"
- Lug size: 0.07"
- Shaft size: 0.46" x 0.25"
- Lug size: 0.07"
- Shaft size: 1.16" x 0.25"



101573EC

SALE

Includes: Washer and nut

Part No.	Mfr. Cross Ref. No.*	Poles	Position	1	10	100
101531EC	RS0261	1	12	\$1.39	\$1.25	\$1.12
101573EC	RS022	2	6	1.35	1.15	.90
101565EC	RS023	3	4	1.95	1.59	1.25
101557EC	RS024	4	3	1.09	.81	.57

* Manufacturer Cross Reference number and manufacturer may vary

DIP Switches

SALE



- Switch contacts: SPST
- Switches are numbered
- 50VDC @ 100mA
- Molded construction
- Standard switches have raised lever
- LP switches are flush to casing
- Pre-tinned leads

Compatible Socket Chart, see website for Sockets

Switch	Socket	Switch	Socket	Switch	Socket
109057EC	112192EC	38826EC	37161EC	38797EC	38607EC
38818EC	51570EC	38842EC	37372EC		

Part No.	Mfr. Cross Ref. No.*	Pos.	1	10	100	1000
109057EC	206-2	2	\$.85	\$.75	\$.69	\$.56
38818EC	206-4	4	.79	.65	.55	.45
38826EC	206-6	6	.89	.79	.69	.59
38842EC	206-8	8	.89	.80	.72	.64
38797EC	206-10	10	.99	.79	.59	.42

* Manufacturer Cross Reference number and manufacturer may vary

More @ www.Jameco.com



See our website for more switches and a selection of Rotary Knobs.
A perfect match for our Rotary Switches above.



Click Action Basic Precision Switches

- 3 terminals: common; normal closed; normal open
- Dielectric strength: 1000VAC 50-60Hz for 1 min.
- Insulation resistance: 100MΩ min. (@ 500VDC)
- Type: NO-NC-common



Part Number	Product Number	Description	Rating	Contact Resistance (initial)	Service Life		Terminals Type	Agency Approval	Pricing		
					Mechanically	Electrically			1	10	100
159599EC	SS0505A	Subminiature	5A @ 125VAC	30milliΩ max.	10 million	200,000	.127" quick discon.	UL	\$3.25	\$2.92	\$2.59
159572EC	VS10N051C	Micro (T90S1D12-12)	10A @ 250VAC	15milliΩ max.	10 million	100,000	.183" quick discon.	UL/CSA	2.89	2.54	2.28
159581EC	VS10N021C2	Micro	10A @ 250VAC	15milliΩ max.	10 million	100,000	.183" quick discon.	UL/CSA	2.45	2.25	1.99



Order 24/7 Toll Free 1-800-455-6119



Small High-Current PC Mount Relays

An inexpensive means of switching loads up to 30 amps. While these small, low-cost relays are designed primarily for the appliance industry and the heating, air conditioning and ventilation markets, they are also well suited for automotive load management and other applications.

- Meets UL class F insulation standard
- Electrical life expectancy is 100,000 operations at rated loads

104926EC: Open frame relay

Part Number	Mfr. Cross Ref. No.	Potter & Brumfield Cross Reference	Fig.	Contact Form	Coil Voltage	Coil (Ohms)	Contact Voltage	Contact Current	Pins	L x W x H (in.)	Pricing			
											1	10	50	100
174449EC	LU-5	T81H5D215	A1	SPDT	5VDC	125	120VAC/24VDC	1A/2A	6	.60 x .40 x .45	\$1.89	\$1.75	\$1.63	\$1.55
104926EC	733SPDT12VDC*	T90N5D12-12	B2	SPDT	12VDC	155	240VAC/28VDC	20A/10A	6	1.2 x .90 x .63	2.49	2.24	2.01	1.81
172937EC	JS1-12V	T72M5D121-12	C3	SPDT	12VDC	400	125VAC/24VDC	10A/5A	5	.85 x .62 x .63	1.15	1.09	.95	.79

* Manufacturer and Manufacturer Cross Ref. number may vary



A



B



C

Fig. 1

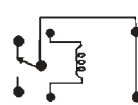


Fig. 2

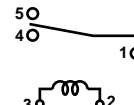
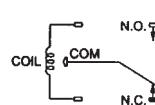


Fig. 3



DIP Relays

- Logic control levels
- Moisture resistant
- Compatible with IC sockets
- Long life with reliable operation
- Compact design/construction
- Excellent for PCB applications

Aromat

FUJITSU



EGE



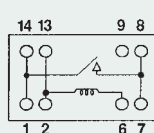
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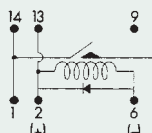
99901EC



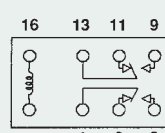
136549EC



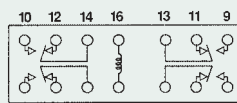
Schematic 1



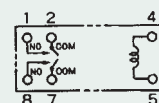
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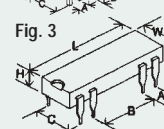
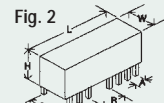
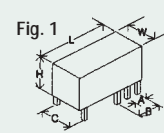
Schematic 3



Schematic 4



Schematic 5



Part Number	Mfr. Cross Ref. No.	Manufacturer	Contact Schem.	Contact Form	Coil Voltage	Coil Ohms	Contact Voltage	Contact Current	Pins	Jameco Socket	Fig.	Size L x W x H (in.)	Leads A x B x C (in.)	Pricing			
														1	10	50	100
106462EC	201A05	Excel Cell Elect.	1	SPST-NO	5VDC	500	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	\$2.25	\$1.91	\$1.60	\$1.29
138430EC	2D1A05	Excel Cell Elect.	2	SPST-NO	5VDC	500	100VDC	0.5A	8	37161	3	.77 x .30 x .22	.10 x .40 x .30	2.29	1.95	1.65	1.34
106471EC	201A12	Excel Cell Elect.	1	SPST-NO	12VDC	1000	100VDC	0.5A	8	37161	3	.78 x .25 x .20	.10 x .40 x .30	2.49	2.10	1.77	1.45
192760EC	5MBU-5	Fujitsu	5	DPST-NO	5VDC	35	240VAC/24VDC	5A	8	—	1	1.13 x .50 x .98	.17 x .76 x .28	1.95	1.55	1.19	.83
173913EC	AZ831-2C-5DSE	American Zettler	3	DPDT	5VDC	125	125VAC/100VDC	.5A/1.25A	8	37401	1	.79 x .38 x .44	.18 x .28 x .29	2.35	1.89	1.45	.99
139977EC	RSB5S	Shin Mei	3	DPDT	5VDC	125	120VAC/30VDC	1A/2A	8	37372	1	.79 x .39 x .37	.20 x .40 x .30	2.49	2.25	1.95	1.75
99338EC	LM12C00	Clare	3	DPDT	6VDC	71	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .43	.20 x .40 x .30	2.75	2.49	2.25	2.05
99901EC	LX200D00	Clare	3	DPDT	12VDC	720	125VAC/100VDC	2A	8	37372	1	.79 x .40 x .30	.20 x .40 x .30	6.95	6.25	5.63	4.49
136549EC	DS4E-M-DC5V*	Aromat	4	4PDT	5VDC	62.5	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	5.95	5.39	4.85	4.35
176313EC	DS4E-M-DC12V	Aromat	4	4PDT	12VDC	360	125VAC/30VDC	.6A/2A	14	112299	2	1.40 x .40 x .36	.20 x .30 x .30	7.95	7.15	6.45	5.79

* Manufacturer and Manufacturer Cross Ref. number may vary

Potter & Brumfield Type Plastic Enclosed Construction Relay

- Dielectric strength: 500VDC (between contact and coil)
- Operating temperature: -35°C to +85°C
- Normally open (NO), normally closed (NC)
- Terminal type: quick connect
- Size: 1.1"L x 1.1"W x 1.0"H

VF4 Type Relays

Part Number	Mfr. Cross Ref. No.	P&B Cross Reference	Contact Form	Coil Voltage	Coil Ohms	Contact Voltage	Contact Current	Pins	Pricing			
									1	10	50	100
148582EC	LD12F	VF485F11	SPDT	12VDC	78	12VDC	40A	5	\$2.49	\$2.25	\$1.95	\$1.75

VF4 Type Socket with Coil Diode

- For use with P/N 148582EC (above)
- Contact voltage/current: 12V/20A
- 12 AWG: 2 black and 1 blue wire
- 18 AWG: 1 black and 1 red wire

- 7.5" wire
- Diode coil suppression

SALE



Part Number	Mfr. Cross Ref. Number	Description	Pricing			
			1	10	50	100
170624EC	RSD03	Relay socket with coil diode (for P/N 148582EC; above)	\$2.35	\$1.89	\$1.45	\$.99

78 More @ www.Jameco.com



Our complete selection of Relays and relay Sockets is at Jameco.com.

General Purpose Relays

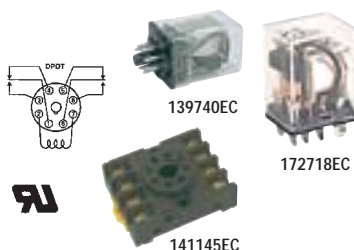
- DPDT • 8-pins

Pin Type Terminals – Series 78

- Contact voltage: 240VAC

Pin Type Terminals – Series 250

- Contact rating: 120/240VAC, 28VDC @ 10A
- Ambient temp. operating: -10°C to +50°C
- Size: 1.4"L x 1.4"W x 2.7"H



Part Number	Mfr. Cross Ref. Number	P & B Cross Reference	Coil Voltage	Pricing		
				1	10	50
Series 78						
172718EC	SCL12DPDT	K10-11D15-R	12VDC	\$4.99	\$4.49	\$3.99
Series 250						
139766EC	BTA1-2C-12VDC	R02-11D10-12	12VDC	\$8.99	\$7.99	\$7.19
139740EC	BTA1-2C-120VAC	R02-11A10-120	120VAC	9.95	8.79	7.99

Series 250 Sockets

Part No.	Voltage	Current	Pins	Size (lbs.)	1	10	50
141145EC	250VAC	20 amps	8	2.0"L x 1.6"W x 0.8"H	\$3.99	\$3.65	\$3.59
141153EC	250VAC	20 amps	11	2.0"L x 1.7"W x 1.2"H	5.45	5.10	4.49

Rayex General Purpose Relays

Potter and Brumfield Type LB2 Series

- DPDT • 8-pins
- Contact rating: 240VAC/30VDC @ 12A
- Mechanical life: 10,000,000 operations
- Electrical life: 100,000 operations min. at rated load



Part Number	Product Number	P & B Cross Reference	Coil Voltage	Pricing			
				1	10	50	100
172718EC	SCL12DPDT	K10-11D15-12	12VDC	\$4.99	\$4.49	\$3.99	\$3.59

Rayex LB2 Socket

- DIN rail snap socket for LB2 relays

Part Number	Product Number	P & B Cross Reference	Pins	Pricing		
				1	10	50
175530EC	PTF08AA	27E895	8	\$5.95	\$5.39	\$4.85



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See our website for a selection of Power PCB Relays.



DC/AC Solid State Relay

- Pins: 4
- Screw terminal with hardware
- Photo isolation
- Metal mounting base
- Control voltage: 3-32VDC
- Contact style: SPST
- Contact voltage: 240VAC
- Contact current: 25A
- Terminal type: screw terminal • UL approved
- Dimensions: 2.3"L x 0.7"W x 1.1"H



Part No.	Mfr. Cross Ref. No.	1	10	50	100
162368EC	ESR51024-025*	\$21.95	\$19.79	\$17.79	\$16.05

* Manufacturer may vary

DC/DC Solid State Relay

- Screw terminal with hardware
- Photo isolation
- Metal mounting base
- Control voltage: 3-32VDC
- Contact style: SPST
- Contact voltage: 60VDC
- Contact current: 4A
- Terminal type: solder lead
- Dimensions: 1.5"L x 0.3"W x 0.9"H



Part No.	Mfr. Cross Ref. No.	1	10	50	100
175222EC	KF0604D*	\$11.95	\$11.25	\$10.25	\$9.22

* Manufacturer may vary

SHARP Solid State Relays

DC to AC

- Effective on-state current: 2A rms
- Input voltage: 1.2V @ 20mA
- Output: 265VAC @ 2.5A
- Operating frequency: 45-65Hz
- Isolation volt: 3000Vrms
- UL/CSA approved



Part No.	Product No.	1	10	50	100
164996EC	S202TA1	\$5.45	\$4.95	\$4.39	\$3.95

Sensors

Ultrasonic Sensor Sets

- Use for motion or distance sensing
- Frequency: 40kHz ±1.0kHz
- Aluminum case

136653EC:

Transmit/Receive Set

- Capacitance: 2000pF ±30%
- Case size: 0.47"H x 0.62" Dia.
- Transmitter: bandwidth 4.0kHz/112dB, sound pressure level 119dB/40±1.0kHz
- Lead length/spacing: 0.39"
- Receiver: bandwidth 3.5kHz @ -71dB, min. sensitivity 65dB/40±1.0kHz (0dB vs 1V pbar) R=3.9kΩ



139491EC:

Transmit/Receive Set

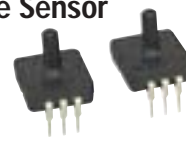
- Capacitance: 2000pF ±20%
- Lead length/spacing: 0.28"
- Transmitter: bandwidth 5.0kHz/100dB, sound pressure level 112dB/40 ±1.0kHz
- Receiver: bandwidth 5.0kHz @ -75dB, min. sensitivity 67dB/40 ±1.0kHz (0dB vs 1V pbar) R=3.9kΩ
- Case size: 0.30"H x 0.43" Dia.

Part No.	Mfr. Cross Ref. No.	1	10	50
136653EC	40TR16F	\$6.95	\$6.29	\$5.65
139491EC	40TR12B	6.95	6.29	5.65



-1.1 to 2.5 PSI Pressure Sensor

- Measurable pressure range: -1.1 to 2.5 PSI
- Maximum load pressure: twice of rated pressure
- Volt-level output
- Operating voltage: 5V @ <10mA
- Maximum excitation voltage: 8V
- Pressure type: gauge pressure
- Pressure media: non-corrosive gas
- On-chip amplification and temp. compensations
- Pre-calibration of offset voltage and span



SALE

Part No.	Product No.	1	10	100
196103EC	XFPN-025-KPGRNW1	\$24.95	\$18.75	\$13.15



0 to 5 PSI Pressure Sensor

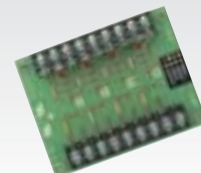
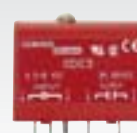
- Maximum load pressure: 10 PSI
- Output voltage: 0 – 4.5V
- Operating voltage: 5V @ 10mA
- Pressure type: gauge pressure
- Pressure media: non-corrosive gas
- Accuracy: ±0.125 PSI at 25°C; ±0.250 PSI at -10 to 65°C
- High level output, on-chip signal conditioned, temperature compensated, and calibrated



Part No.	Product No.	1	10	100
173657EC	XFPN-050-KPGT1...	\$15.95	\$14.35	\$12.95

More Modules and Boards @ www.Jameco.com

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**.100" IDC
Socket Connectors****Double Row Polarized
IDC Socket Connectors**

- Mates with 2 rows of .025" Sq. or Dia. posts on patterns of .100" centers (male headers, see below) • Current rating: 1A
- Industry standard IDC socket (plastic)
- Temperature rating: -55°C to +105°C
- Use P/N 73251EC, pg 50: insulation displacement connection crimper for these connectors

Part No.	Mfr. Cross		Contacts	1	10	100	1000
	Ref. No.						
32491EC	S10	10	.....	\$.29	\$.25	\$.19	\$.15
32563EC	S26	26	.....	.45	.35	.29	.19
32643EC	S34	34	.....	.49	.39	.35	.25
32678EC	S40	40	.....	.55	.45	.39	.29
32707EC	S50	50	.....	.65	.55	.45	.35

.197" (5mm) Terminal Blocks

- Materials: housing: polyimide; solder: tin plated brass
- Lead spacing: .197" • Wire range: 12-24 AWG
- Contact rating: 300V @ 10A • PC mount
- Insulation resistance: 500MΩ or more @ 500V
- Modular housing: end-to-end stackability
- Terminals interlocking with same series

DT Series**DT128 Type
(Side Entry)**

- Block width & height: .40" x .55"

Part No.	Fig.	Term.	Block Lgth	1	10	100	1000
99426EC	1	2	0.4"	\$.72	\$.55	\$.44	\$.40
99397EC	1	3	0.6" .....	.89	.79	.69	.59

EK500 Series

Part No.	Fig.	Term.	Block Lgth	1	10	100	1000
160784EC	2	2	0.4"	\$.75	\$.65	\$.50	\$.43
161066EC	3	2	0.4" ...	\$.75	\$.65	\$.49	\$.39

EK500V Type (Side Entry)

- Block width & height: .40" x .55"

Part No.	Fig.	Term.	Block Lgth	1	10	100	1000
160784EC	2	2	0.4"	\$.75	\$.65	\$.50	\$.43

EK500A Type (45° Entry)

- Block width & height: .48" x .61"

Part No.	Fig.	Term.	Block Lgth	1	10	100	1000
161066EC	3	2	0.4" ...	\$.75	\$.65	\$.49	\$.39

**.197" (5mm) Vertical
Terminal Blocks****Side Entry**

- Rated voltage (UL): 250V
- Rated current: 15A
- Wire size: 14-22 AWG
- PCB hole diameter: .050"
- Spacing: .197" • Terminal block: copper zinc

Part No.	Term.	Size (L"xW"xH")	1	10	100	1000
189675EC	2	.42 x .30 x .37 ..	\$.79	\$.71	\$.64	\$.58
189667EC	3	.61 x .30 x .3789	.80	.72	.61

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A complete selection
of Terminal Blocks can
be bought on our website.

**.200" (5.08mm) Vertical
Terminal Blocks****Side Entry**

- Rated voltage (UL): 250V
- Rated current: 15A
- Wire size: 14-22 AWG
- PCB hole diameter: .050"
- Spacing: .200"
- Insulating material: polyimide
- Terminal block: copper zinc
- Wire guard: copper nickel

Part No.	Term.	Size (L"xW"xH")	1	10	100	1000
152346EC	2	.42 x .35 x .49	\$.65	\$.55	\$.45	\$.39
152354EC	3	.62 x .35 x .49	.51	.46	.38	.32

**KULKA® 601 GP Series
Double Row Terminal Block**

- Base: general purpose phenolic; 150°C
- Screws: #6-32, binder head, phillips-slot
- Terminals: brass plated • Height: .50"
- Width: 1.12" • .437" (11 mm) centers
- 1100Vrms; 20A ratings; for 14-16 AWG wires
- Open block design • UL/CSA/CE approved

Part Number	Product Number	Poles	Dimensions A"	B"	1	10	50
188701EC	601GP12	12	5.69	6.00	\$5.49	\$4.95	\$3.95

.156" (3.9mm) Center Crimp Pin

- Use with .156 housings (below)
- Material: brass/tin plated
- Pin wire gauge: 22-26 AWG
- Prepackaged: order in increments of 10, 100, 1000

Part No.	Mfr. Cross Ref. No.	10	100	1000
78318EC	AMP501T	\$.11	\$.08	\$.07

**.156" (3.9mm) Center
Housing Connectors**

- Common to many power supplies carried by Jameco. Some power supplies (pgs 21-23) may require multiple connectors
- Housing material: nylon 66, UL94V-2
- Use with crimp pins, 78318EC, above

* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Pins	1	10	100	1000
104715EC	LCH4	4 .....	* \$	.22	.15	.12
104731EC	LCH6	6 .....	.33	.30	.24	.15

**.100" Non-Polarized Connector
Housings and Crimp Pins**

- Mates with .025" square post on pattern of .100" centers (male headers, see above)
- Current rating: 1A • Pin material: brass/tin plated
- Pin wire gauge: 22-26 AWG • Plastic
- Temperature rating: -55°C to +105°C
- Prepackaged: order in increments of 10, 100 or 1000

Part No.	Mfr. Cross Ref. No.	Cont.	10	100	1000
100811EC	SCH2	2	\$.27	\$.22	\$.18
157382EC	SCH3	3 .....	.31	.24	.19
100802EC	SCH4	4 .....	.29	.25	.19
100765EC	FCH1	Female pin .....	.11	.09	.06
145357EC	MCH1	Male pin .....	.14	.13	.12

.100" and 2mm Shorting Blocks

- Mates to .025" square posts on .100" centers
- Shorting socket jumper to address or code strip line plugs
- Mate with male headers (below)
- Pin material: phosphor bronze
- Prepackaged: order in increments of 10, 100 or 1000

Open: open on top to allow for a test point while Closed: closed – functionally they are the same

Part No.	Description	10	100	1000
22023EC	Top open, black	\$.12	\$.09	\$.06
19140EC	Top closed, black .....	.12	.09	.06
112441EC	Top closed, blue .....	.12	.09	.06

.100" Male Headers (Gold)

Part No.	109567EC	139563EC	109575EC	103270EC

- Snap apart to fit your application
- Solder to PC boards for instant plug-in access via shorting blocks, above • Contact area: gold
- Contact material: phosphor bronze
- Current rating: 1 amp
- Temp. range: -55°C to +120°C
- Insulation material: glass filled polyester
- .025" square posts on a .100" x .100" matrix
- Use with crimp connector housing, left

* Prepackaged: order in increments of 10, 100 or 1000

**.100" Straight
Male Headers
Single Row**

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
108337EC	SMH02	2 .....	* \$	.16	.14	.13
109575EC	SMH03	3	*	.14	.12	.11
103341EC	SMH30	30 .....	.35	.31	.28	.25
160881EC	SMH40	40 .....	.49	.44	.40	.36

**.100" Straight
Male Headers
Double Row**

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
115027EC	923804DS	4 .....	* \$	.10	\$.09	\$.07
115035EC	923806DS	6	*	.18	.16	.14
109516EC	923808DS	8	*	.18	.16	.14
67820EC	923810DS	10	*	.18	.16	.14
109567EC	923816DS	16 .....	.42	.38	.34	.30
117196EC	923880DS	80 .....	.83	.75	.67	.60

**.100" Right Angle
Male Headers
Single Row**

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
103270EC	RMH36	36	\$.75	\$.64	\$.58	\$.41

**.100" Right Angle
Male Headers
Double Row**

Part No.	Mfr. Cross Ref. No.	Contacts	1	10	100	1000
139563EC	923880DR	80 ...	\$.15	\$.99	\$.89	\$.59

.100" Low-Profile Straight Male Shrouded Headers

- Features: UL recognized, CSA certified; .025" square post mates with sockets on .100" x .100" grid
- Contact: phosphor bronze, gold plated
- Material: glass filled polyester, gray, UL94V-0
- Use with IDC socket connectors, pg 34



Part No.	Description	1	10	100	1000
67811EC	10-pin	\$.39	\$.35	\$.32	\$.28
68371EC	26-pin	.54	.42	.35	.21

.100" (2.5mm) Female Header Receptacles

- Gold plated contacts
- 0.1" contact center

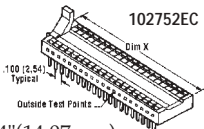


Vertical Mount (Top Entry)

Part No.	Contacts	Type	1	10	100	500
163862EC	34	Double row	\$.99	\$.87	\$.76	\$.61
111704EC	40	Double (Tin)	1.29	1.15	.99	.89

ARIES Electronics (Europe) Low Profile ZIF Sockets

- Provides a low cost solution for ZIF test socket requirements. It has a height of only .319" (8.10mm), and even with the handle in open position measures just .554" (14.07mm).
- Strong rigid cast metal can provides uniform action over entire contact area



Part No.	Aries No.	Pins	Dim X	1	10	100
102744EC	28-526	28	1.64" ...	\$5.49	\$4.99	\$4.49
102752EC	40-526	40	2.24" ...	6.95	6.39	5.75

ARIES Electronics (Europe) Universal ZIF Sockets

- Solder directly to PCB or plug directly into IC socket
- Screw mounting holes for reliable operation
- Accepts .300" to .600" IC centers x .1" spacing



Part No.	Aries No.	Pins	1	10	100
103991EC	24-6554-10	24	.... \$7.49	\$6.79	\$5.99
104002EC	28-6554-10	28	.... 8.45	7.39	7.15
104029EC	40-6554-10	40	.... 11.25	9.80	9.45

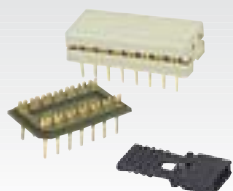
PLCC Solder Tail Sockets

- Solder tail allows through-hole board patterns in .100" grid
- Accepts JEDEC type "A" plastic leaded chip (0.05" centers)
- Thru-hole lead length: .125"
- Body height: .375"



Part No.	Mfr. Cross Ref. No.	Pins	1	10	50	100
71618EC	G1P444	44	... \$1.15	\$.99	\$.81	\$.69

More @ www.Jameco.com

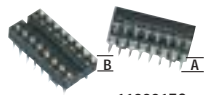


See our website for other Shorting Blocks and Plugs.

Solder Tail Low Profile Sockets

Dual Wipe

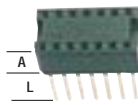
- Material: beryllium copper or phosphor bronze
- Contact current: 1A
- Tin-plated contacts and tails
- Contact resistance: less than 5mΩ
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide • Sleeve material: brass
- Thru-hole lead lgth: .140" (A)
- Body height: .188" (B)
- Prepackaged: order in increments of 10, 100 or 1000



Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	1000
112205EC	8LPD	8	0.3	\$.09	\$.08	\$.07	
112213EC	14LPD	14	0.3 ....	.10	.075	.05	
112221EC	16LPD	16	0.3 ....	.13	.115	.095	
112248EC	20LPD	20	0.3 ....	.17	.14	.11	
112299EC	28SLPD	28	0.3 ....	.21	.19	.17	
112310EC	40LPD	40	0.6 ....	.26	.23	.19	

Wire Wrap Sockets

- Contact plating/leads: gold (WW) or tin (TWW); Dual Wipe
- Material: beryllium copper or phosphor bronze
- Contact current: 1A
- Contact resistance: less than 5mΩ
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide
- Thru-hole lead length: .438" (L)
- Sleeve material: brass • Body height: .300" (A)



Gold (WW)

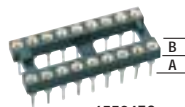
Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	500
37233EC	14WW2	14	0.3	\$1.49	\$1.35	\$1.19	\$1.09
37479EC	16WW2	16	0.3	1.75	1.59	1.43	1.29
38674EC	20WW2	20	0.3	2.25	1.99	1.82	1.65

Tin (TWW)

Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	500
37217EC	14TWW2	14	0.3	\$1.15	\$1.03	\$.93	\$.84
37436EC	16TWW2	16	0.3	.... .99	.89	.73	.66

Machine Tooled Solder Tail Low Profile Sockets

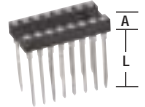
- Contact plating: gold
- Tin-plated leads
- Contact current: 3A
- Multiple contact elements
- Material: beryllium copper or phosphor bronze
- Contact resistance: less than 5mΩ
- Dielectric withstanding voltage: 300Vrms
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide • Sleeve material: brass
- Thru-hole lead length: .177" (A) • Body ht.: .117" (B)



Part No.	Mfr. Cross Ref. No.	Pins	Width (in.)	1	10	100	1000
51625EC	8MLP	8	0.3	.. \$.25	\$.22	\$.19	\$.17
37196EC	14MLP	14	0.3	.... .42	.38	.33	.30
37401EC	16MLP	16	0.3	.... .47	.43	.37	.34
65584EC	18MLP	18	0.3	.... .55	.49	.43	.39
41136EC	40MLP	40	0.6	.. 1.19	1.05	.79	.69

Machine Tooled Wire Wrap Sockets

- Contact plating: gold
- Tin-plated leads
- Contact current: 3A
- Contact resistance: less than 5mΩ
- Dielectric withstanding voltage: 300Vrms
- Material: beryllium copper or phosphor bronze
- Insulation resistance: greater than 1000MΩ
- Insulator: glass-filled polyester or glass-filled polyphenylene sulfide • Sleeve material: brass
- Thru-hole lead length: .515" (L)
- Body height: .115" (A)



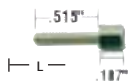
Part No.	Mfr. Cross Ref. No.	Width (in.)	1	10	100	500
62050EC	14MSWW3	14 0.3 ..	\$.93	\$.80	\$.67	\$.60
37410EC	16MSWW3	16 0.3 ..	1.09	.93	.78	.69
38631EC	20MSWW3	20 0.3 ..	1.33	1.14	.95	.86
40336EC	28MSWW3	28 0.6 ..	1.79	1.55	1.29	1.17
94502EC	40MSWW3	40 0.6 ..	2.66	2.28	1.90	1.71

4-40 Mounting Screw Hardware for D-Subminiature Connectors

4-40 x .187" Jack Screws

- *Prepackaged: order in increments of 10, 100 or 1000

108986EC



Part No.	Description	1	10	100	1000
172603EC	.315"L jack screw	...	* \$.17	\$.15	\$.14
102816EC	.435"L jack screw	....	.49	.46	.41
108986EC	.515"L jack screw	....	.55	.50	.45

4-40 Screw Sets



- 102808EC: 4-40 screw (.30"L) and retainer set
- 16547EC: 4-40 x .187" jack screw (.31"L thread), washer, lock washer and nut set

- Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	10	100	1000
102808EC	Screw/retainer set	.... \$ .35	\$.30	\$.20
16547EC	Screw/nut set	.... .31	.25	.17

D-Subminiature Connector Hoods



- Use with D-sub solder cup and housing style connectors
- D Series: plastic hood with strain relief (gray)
- MD Series: metal coated plastic hood w/ strain relief
- Includes: Hardware

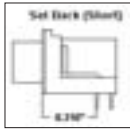
Part No.	Mfr. Cross Ref. No.	Conn.	1	10	100	1000
15721EC	DB9H	9-pin	\$.49	\$.45	\$.39	\$.35
25620EC	MDB9H	9-pin ....	.59	.49	.39	.35
147740EC	DB9MH	9-pin	1.45	1.29	1.15	.99
15018EC	DA15H	15-pin ....	.49	.45	.40	.35
25566EC	MDA15H	15-pin ....	.56	.44	.36	.31
15085EC	DB25H	25-pin ....	.45	.39	.35	.32
25603EC	MDB25H	25-pin ....	.59	.49	.42	.35

D-Subminiature Connectors

- Metal shells are tin-plated for improved EMI/RFI shielding
- Insulation resistance: minimum 1000MΩ at 500VDC
- Dielectric withstanding voltage: 1000V (one minute)

- Current rating: 1A to 5A
- High temperature thermoplastic
- Insulation material: PBT, UL rated 94V-0

Right Angle PC Mount Connectors



0.318" Set Back

- Short style
- Lead length: .138"
- Lead spacing: .115"
- Shell: metal
- Current rating: 1A



Mfr. Cross		Cont. Gender		1	10	100	500
Part No.	Ref. No.						
104942EC	DB9P318	9	M	.55	.45	.35	.29
104951EC	DB9S318	9	F	.49	.44	.40	.36
71124EC	DA15P318	15	M	.69	.59	.55	.49
77956EC	DA15S318	15	F	.69	.59	.55	.45
15149EC	DB25P318	25	M	.79	.65	.55	.42
15181EC	DB25S318	25	F	.79	.70	.62	.43

IDC Ribbon Cable Connectors

- Current rating: 1 amp
- Temp range: -55°C to +120°C
- Insulation material: glass-filled polyester
- Contact material: phosphor bronze
- Terminates with standard D-type connectors



Mfr. Cross		Cont. Gen.		Shell	1	10	100
Part No.	Ref. No.						
109225EC	MDB9P	9	M	metal	\$1.35	\$1.25	\$1.09
12503EC	CDB9P	9	M	plastic	2.49	1.79	1.59
109217EC	MDB9S	9	F	metal	1.49	1.19	1.05
12520EC	CDB9S	9	F	plastic	2.49	2.29	1.75
115983EC	MDB25P	25	M	metal	1.85	1.69	1.45
12335EC	CDB25P	25	M	plastic	1.89	1.69	1.29
115975EC	MDB25S	25	F	metal	1.75	1.45	1.15
12431EC	CDB25S	25	F	plastic	1.95	1.79	1.39

† 109225EC/109217EC: require flat cable with .0625" centers

Solder-Cup Connectors



15114EC Front



15114EC Back

- Compatible with 24 AWG communications and 22 AWG solid cable, pg 37

Part No.	Contacts	Gen.	Shell	1	10	100	1000
15747EC	9	M	metal	\$.56	\$.44	\$.36	\$.24
15771EC	9	F	metal	\$.59	\$.49	\$.44	\$.31
15034EC	15	M	metal	\$.55	\$.49	\$.42	\$.29
15051EC	15	F	metal	\$.59	\$.49	\$.39	\$.24
15114EC	25	M	metal	\$.99	\$.89	\$.79	\$.71
15157EC	25	F	metal	\$.89	\$.80	\$.69	\$.61

Straight PC Mount Connectors

- Non-removable contacts
- 125 Vrms
- Current rating: 5 amps
- Operating temp.: -65°F to +250°F



15780EC



15122EC

Mfr. Cross		Cont. Gen.		Shell	1	10	100
Part No.	Ref. No.						
111691EC	DB9PPCB	9	M	metal	\$.55	\$.45	\$.32
15780EC	DB9SPCB	9	F	metal	\$.55	\$.45	\$.32
176760EC	DA15PPCB	15	M	metal	\$.49	\$.39	\$.27
176751EC	DA15SPCB	15	F	metal	\$.49	\$.44	\$.39
15122EC	DB25PPCB	25	M	metal	\$.65	\$.59	\$.42
15165EC	DB25SPCB	25	F	metal	\$.74	\$.55	\$.31

Insertion/Extraction Tool

- Exchangeable tips
- For male & female crimp pins



Part No.	Description	1	10	100
19094EC	Insertion/extraction tool	\$3.49	\$2.99	\$2.59

PANAMISE IDC Bench Press and Cable Cutter

Designed for low to medium volume mass termination of various IDC connectors on flat ribbon cable.



Part No.	Prod. No.	Description	Wt. (lbs.)	1	10
27174EC	M505	Bench press	7.0	\$179.95	\$159.95

M505 Accessories

27182EC	M507	Cable cutter	0.9	\$66.95	\$61.95
27203EC	M510	Base plate	0.5	26.95	24.29

171-Pc. Solderless Terminal Kit

- Clear, hinged plastic box
- Use crimping tool P/N 72995EC, pg 50

170 Terminals and Connectors!



Qty.	Description	Wire Gauge	Blade Size	Qty.	Description	Wire Gauge	Blade Size
10	Male spade	16-22	1/4"	10	Ring term.	14-16	#10
10	Male spade	14-16	1/4"	5	Ring term.	10-12	#10
10	Fem. spade	16-22	1/4"	5	Ring term.	10-12	#14
10	Fem. spade	14-16	1/4"	10	Spade term.	16-22	#6
10	Ring term.	16-22	#6	10	Spade term.	16-22	#8
10	Ring term.	16-22	#8	10	Spade term.	14-16	#10
10	Ring term.	16-14	#10	10	Butt connec.	16-22	-
15	Ring term.	14-16	#6	10	Butt connec.	14-16	-
10	Ring term.	14-16	#8	5	Butt connec.	10-12	-

Part No.	Description	1	10	25
10989EC	Terminal kit	\$8.95	\$7.95	\$7.25

Discover more @ www.Jameco.com



Additional D-Subminiature Connectors on our website.

Heat Guns, Cable Ties and Accessories

Heat Gun/Stripper

Dual-Setting

- Use with heat shrink material
- Works with spot-dry paint, plaster, spackle cure adhesives
- Will remove adhesive-applied tiles and linoleum without chipping
- Thaw pipes, frozen locks and loosen rusted bolts



Part No.	Description	1	10	25
76865EC	Heat gun	\$39.95	\$35.95	\$31.95

Weller® 250-Watt, 3-Setting Industrial Heat Gun

- 750°F to 800°F hot air at nozzle; 3-position switch; hot-off-cool
- Designed for assembly and repair applications such as shrink tubing and vinyl, epoxy curing/drying/cooling
- Long-life heater and fan components
- 120VAC @ 60Hz
- 3-wire grounded plug; 6' cord



Part No.	Product No.	Description	1	10
191943EC	6966C	Heat gun	\$119.95	\$107.95

PVC Heat Shrink Tubing

- 2:1 uniform shrink ratio
- Color: black
- Shrink temp: 125°C
- Sold in 10' and 100' increments
- UL/CSA approved



182748EC

182772EC

Part No.	Dia. before (mm)	10 ft.	100 ft.
184721EC	.12" (3)	\$1.19	\$10.50
182730EC	.16" (4)	1.39	12.50
182748EC	.20" (5)	1.45	13.00
182756EC	.24" (6)	1.49	13.50
182764EC	.31" (8)	1.79	16.00
182772EC	.43" (11)	2.80	19.00
182781EC	.59" (15)	3.50	30.00

Our complete selection is @ www.Jameco.com



Other Cable Tools and Accessories available online.

Nylon Cable Ties

Weather Resistant



104141EC



- Contain Carbonate A for greater resistance to ultra violet rays in outdoor use
- Color: black
- Sold in increments of 100s or 1000s

Part No.	Tensile Strength (lbs.)	Dimensions (L" x W")	100	1000
104141EC	18	4.0 x 0.10	\$.037	\$.024
190781EC	40	8.0 x 0.13	.07	.06
190801EC	40	13.0 x 0.14	.113	.088

Cable Tie Assortments

- Tensile strength: 18-50 lbs.

145701EC:

1000 pcs. (4"L); 10 colors

150412EC:

500 pcs. (4"L); 300 pcs. (8"L);

50 pcs. (11"L), 5 colors

Part No.	Weight (lbs.)	1	10	50
145701EC	0.7	\$9.49	\$8.49	\$7.39
150412EC	1.7	13.95	11.49	9.95



Solid Hook-Up Wire – 22 AWG

- Temperature range: -55°C to +105°C
- Passes UL VW-1 flame test
- MIL-W-16878D type B
- Weight: 100' (0.3 lbs.); 1000' (3.8 lbs.)
- For use with breadboards such as the JE20 series, pg 39



Part No.	Mfr. Cross Ref. No.	Color	100 ft.
36775EC	122BE/K	Blue	\$29.95
36804EC	122BK/K	Black	35.95
36839EC	122G/K	Green	29.95
36863EC	122R/K	Red	34.49
36927EC	122Y/K	Yellow	29.95

Gray Flat Ribbon Cable – 28 AWG

- Single edge red stripe for pin 1 orientation
- Center spacing: 0.05"
- 28 AWG (7 x 36)
- Insulation: polyvinyl chloride (PVC)
- Voltage rating: 300V
- Temperature rating: -20°C to +80°C
- Stranded copper wire
- Prepackaged and priced in increments of 10', 25', 100' or 500'



Part No.	Mfr. Cross Ref. No.	Cond.	10 ft.	25 ft.	100 ft.	500 ft.
135538EC	171-10	10	\$1.49	\$3.20	\$11.50	\$47.50
37760EC	171-25	25	3.90	8.75	25.00	110.00
37920EC	171-40	40	6.20	14.75	40.00	180.00
37954EC	171-50	50	6.75	14.50	49.00	210.00

Nylon Cable Tie Mount

- Screw tab & cradle mount adhesive
- 1.1" square adhesive 4-way cable tie used with 0.2"W max
- Sold in increments of 10, 100 or 1000



Part No.	Description	10	100	1000
71394EC	4-way cable tie	\$0.23	\$1.19	\$11.40

Multicolor Flat Ribbon Cable – 28 AWG

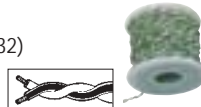
- Standard 10-color repeat sequence
- Center spacing: 0.05"
- Voltage rating: 300V
- Temperature rating: -20°C to +80°C
- Stranded copper wire • 28 AWG (7 x 36)
- Prepackaged and priced in increments of 10', 25', 100' or 500'



Part No.	Mfr. Cross Ref. No.	Cond.	10 ft.	25 ft.	100 ft.	500 ft.
112547EC	28RC10	10	\$1.95	\$4.50	\$17.50	\$70.00
105697EC	28RC25	25	6.29	14.25	49.95	219.95
105726EC	28RC40	40	8.69	19.553	69.49	299.95

Twisted Pair Cable – 24 AWG

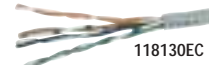
- PVC insulation
- Use for hook up wire
- Stranded tinned wire (7 x 32)
- 80C° • 300 V
- Reduced EMI
- Weight: 100' 0.5 lbs.



Part No.	Mfr. Cross Ref. No.	Color	100 ft.
105806EC	224GW/K	Green/white	\$44.95

Category 5 Network Cable

- 100MHz • 8C • Gray
- 4 twisted pairs • UTP
- Insulation: polyethylene
- Nom. OD.: 189" • Nom. impedance: 100Ω
- Solid: uses modular plug P/N 119343EC, pg 52
- Stranded: uses modular plug P/N 79281EC, pg 52
- Prepackaged and priced in increments of 25' or 100'



24 AWG UTP Category 5 – 100MHz

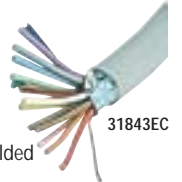
Part No.	Description	25 ft.	100 ft.	1000 ft.
118130EC	Stranded(7/32 AWG)	\$5.95	\$19.35	\$164.50

24 AWG UTP Category 5 Enhanced – 350MHz

Part No.	Description	25 ft.	100 ft.	1000 ft.
176225EC	Solid (gray)	\$5.00	\$17.00	\$100.00
176233EC	Stranded (gray)	6.00	21.00	180.00

Multiconductor Shielded Computer Communication Cable – 24 AWG

- Stranded copper wire, multi-colored insulation
- Insulated with polyvinyl chloride (PVC)
- Voltage rating: 300V
- Color: gray • Drain wire
- 24 AWG (7 x 32 AWG) • Shielded 100% w/ aluminum mylar
- Prepackaged and priced in increments of 25' or 100'



Part No.	Mfr. Cross Ref. No.	Cond.	Dia.	25 ft.	100 ft.	1000 ft.
31860EC	SC4	4	0.20"	\$4.75	\$17.00	\$140.00
31878EC	SC9	9	0.23"	11.25	35.00	270.00
31843EC	SC15	15	0.28"	13.25	49.00	440.00
31851EC	SC25	25	0.37"	13.25	71.00	640.00

Kynar™ Wire Wrap Wire – 30 AWG

- Assorted color coded insulation
- Used for prototyping
- Color coded Kynar™ (Polyvinylidene Fluoride) insulation
- Silver plated copper (solid conductor)
- Temperature: -40°C to +125°C
- See pg 35 for sockets
- Wire wrap tools, see website • UL 1423
- Passes UL VW-1 flame test



Part No.	Color	Wt. (lbs.)	100 ft.
22550EC	Blue	0.6	\$29.95
22584EC	Black	0.6	29.95
22648EC	Red	0.6	29.95
22613EC	Green	0.6	29.95

16 More @ www.Jameco.com



See our website for
300V Stranded Hook-Up
Wire in all colors.

IC Programmers and Erasers

7 more @ www.Jameco.com

One-Socket EPROM Programmer 8MB

Serial Port Interface

- ZIF socket
- Motorola s1f, s2f and s3f can convert to binary or ASCII prior to download
- Baud rate configurable
- Data bits: 8
- Start/Stop bits: 1
- Parity: none, even, odd, default none
- Flow control: none, RTS/CTS, XON/XOFF, Default RTS/CTS
- One-year warranty
- Command line interpreter enables the user to enter one or more single character commands at once
- Programs EPROMs up to 8Mbits: 2716-27080; 2804-28256; also 27CXXX and 28CXXX series
- Maximum pins: 32 • Weight: 3.0 lbs.



ART
Applied Reader Technology

Part No.	Description	1	10
81699EC	8Mbits EPROM prog.	\$209.95	\$188.95

EPROM Erasers and Accessories

- Erases all EPROMs
- 66042EC:
- Erases 1 chip in 7 minutes
- Conductive foam liner eliminates static build-up
- UV intensity: 6.5mW/cm² • One-year warranty
- Requires: Four AA batteries (not included), P/N 32627EC (below)



- 15712EC:
- Erases 1 chip in 15 min. or 8 chips in 21 minutes
- Maintains constant exposure distance of 1"
- Conductive foam liner eliminates static build-up
- Built-in safety lock to prevent UV exposure
- Complete with holding tray for 8 chips
- UV intensity: 6.8mW/cm² • One-year warranty



Part No.	Description	1	10	25
66042EC	Portable eraser	\$64.95	\$58.95	\$52.95
15712EC	8-chip eraser	109.95	104.95	99.95
34382EC	Lamp for 15712EC	34.95	34.95	34.95
13864EC	Foam (12"x24"x0.25")	7.95	6.95	5.95
32627EC	'AA' Ni-Cad battery	1.95	1.75	1.49



512k Two-Socket E(EP)ROM Programmer

Compact unit operates stand-alone or interfaces with your computer via the printer port.

- Programs EPROMs up to 25V, Flash EPROMs (5V and 12V) EEPROMs, and SRAMs
- 2 sockets for master/ slave operation
- Stand alone mode uses two optional 9V batteries (P/N 151095EC, pg 65) or included 12VDC @ 500mA adapter
- One-year warranty
- Weight: 2.1 lbs.
- Size: 6.4"L x 4.3"W x 2.2"H



FUNCTIONS

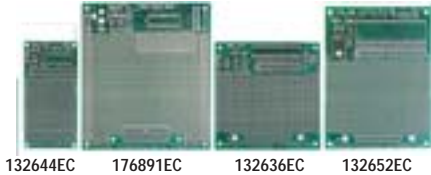
- Stand alone mode
- Functions Set - Blank check
- IC Type select - Program
- Verify and check sum
- Remote control mode
- Type - Read - Program
- Verify - Disk - Help
- Process - Parameter

Includes: Adapter, cable and CD-ROM

Part No.	Description	1	10
130155EC	EPROM writer	\$289.95	\$259.95

*microEngineering Labs***"PICProto" Prototyping Boards**

- High quality blank prototyping boards for PICmicro microcontrollers
- Holds microcontroller, 5V regulator, oscillator, capacitors and DB9-25 connector
- Double-sided board with plated-through holes



Includes: Documentation sheet with schematic, suggested parts and placement

PICProto 18, 18L: For all 18-pin PICs including PIC16C52, 54, 56, 58, 55A, 55B, 61, 620, 621, 622, 71, 710, 711, 712, 715, 716, 84, 16CE623, 624, 625, 16F627, 628, 83, and 84

Part No.	Description	Size (L" x W")	1	10
132644EC	PICProto 18	3.0 x 1.5	\$9.95	\$8.95
176891EC	PICProto 18L	3.6 x 4.1	19.95	17.95

PICProto 3: For the 28-pin PIC16C62, 63, 642, 66, 72, 76, 773, 16F73, 76, 870, 872, 873, 876, 18C242, and 252

132636EC	PICProto 3	3.0 x 3.0	\$14.95	\$13.49
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PICProto 64: For the 40-pin PIC16C64, 65, 662, 67, 74, 77, 774, 16F74, 77, 871, 874, 18C422, and 452

132652EC	PICProto 64	4.0 x 3.0	\$16.95	\$14.95
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*microEngineering Labs***EPIC Plus PICmicro Programmer**

The EPIC Plus Programmer quickly and easily programs the PIC12Cxxx, 12CExxx, 16C505, 16C55x, 6xx, 7xx, 84, 9xx, 16CE62x, 16F62X, 7x, 8x, 87x, 14C000, 17C7xx, 18Cxxx microcontrollers from Microchip. The basic programmer includes an 18-pin socket for programming 8, 14 and 18-pin PICmicro MCUs.

- Simple installation with parallel port (printer) interface
- Interactive software for Windows and DOS
- Command line operation for automated, non-interactive programming

Requires: Two 9V batteries or AC adapter (below) **Includes:** Assembler software

Part No.	Description	1	10
132679EC	EPIC Plus PICmicro programmer	\$59.95	\$53.95
162317EC	AC wall adapter (16VDC/500mA, details on pg 27)	7.95	6.95
67256EC	6' DB25 cable (details on pg 56)	6.45	5.79

*microEngineering Labs***PICBasic and PICBasic Pro Compiler**

Converts your BASIC programs into files that can be programmed directly into a PICmicro MCU.

- Compatible with most PICmicro MCU programmers including EPIC plus
- I2C instructions to access external serial EEPROMs
- Use in DOS or Windows (includes Windows editor/DE software)

132661EC: PICBasic Compiler

- Expanded BASIC Stamp I compatible instruction set
- Supports PC12C67x, PIC14Cxxx, PIC16C55x, 66x, 7xx, 84, 92x, and PIC16CF8xx microcontrollers
- May use up to 2k of code space

150543EC: PICBasic Pro Compiler

- Direct and library routine access to any pin or register
- Automation page boundary handling past 2k
- Bit, byte, word arrays
- Real If...Then...Else...Endif
- Hierarchical expression handling
- Built-in LCD support
- MPLAB/MPASM/ICE compatibility
- Supports 12C5xx, 12C67x, 12CE67x, 14C000, 16C5x, 16C55x, 6xx, 7xx, 84, 92x, 16CE62x, 16F62x, 7x, 8x, 87x, 17Cxxx, and 18Cxxx microcontrollers

Part No.	Description	1	10
132661EC	PICBasic compiler	\$99.95	\$89.95
150543EC	PICBasic Pro compiler	249.95	224.95

*microEngineering Labs***LAB-X1 Experimenter's Module Board**

A pre-assembled experimenter's platform, providing an assembled testbed containing the circuitry commonly used with PICmicro microcontrollers. Projects may be created using the LAB-X1, including calculator, voltmeter, LCD backpack, tone dialer, and RC servo controller.

- 40-pin ZIF socket for PICmicro MCU (not included, PIC16F877-20/P recommended)
- Jumper selectable oscillator from 4MHz to 20MHz
- Reset button
- 16 switch keypad
- 3 potentiometers
- LED bargraph
- 2 lines x 20 characters LCD module
- Speaker
- 2 RC servo connectors
- RS232 interface
- Socket for RS485 interface (device not included)
- Socket for real time clock/serial analog to digital converter (devices not included)
- EPIC in-circuit programming connector
- Prototyping area for additional circuit
- Wiring for microchip in-circuit debug connector

Requires: AC adapter (below)

Part No.	Description	1	10
169113EC	LAB-X1 Experimenter Board	\$199.95	\$189.95
176882EC	PIC16F877-20/P microcontroller (pg 11)	9.49	8.49
127976EC	AC adapter (details on web)	4.75	4.25

**Circuit Boards and Accessories****Photo Etch™ Printed Circuit Kit**

Generate your own 1:1 artwork. Then use the patented Fast Neg film process to make a photo negative and sensitize and expose a blank copper board. Finish by developing and etching. No camera or darkroom is required.



Part No.	Prod. No.	Description	1	10
16731EC	12-750*	Printed circuit kit ...	\$39.95	\$36.95

* Shipped via UPS ground to continental U.S. only

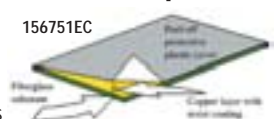
DATAK**Photo Etch Accessories**

Part No.	Prod. No.	Description	1	10
16758EC	ER8*	Neg. resist dev. 16 oz	\$6.95	\$5.95
16723EC	ER18	TINNIT™ 1 pint	6.95	5.95
70261EC	ER71*	Photo resist liquid	8.95	7.95

* Shipped via UPS ground to continental U.S. only

DATAK**Pre-Sensitized Circuit Boards & Developer**

- Pre-coated circuit board
- Size: 3.0"L x 4.0"W x 1/16" T



Includes: Instructions

Part No.	Description	1	10	25
156751EC	Single sided	\$4.95	\$4.49	\$3.95
156742EC	Double sided	6.49	5.85	5.25
156734EC*	4 oz. Pos. developer..	6.95	5.95	4.95

* Shipped via UPS ground to continental U.S. only

Copper-Plated Blank Circuit Boards

Ideal for hobbyists and students doing prototypes of circuits. Copper plating on board for either single-sided or double-sided boards.

- 1.6mm thickness

Part No.	Mfr. Cross Ref. No.	Description	Size (L" x W")	Fig.	Wt. (lbs.)	1	10	50
169279EC	PCBS3X6	Single side	3.0 x 6.0	3	0.1	\$2.95	\$2.69	\$2.39
169287EC	PCBS6X6	Single side	6.0 x 6.0	2	0.2	4.95	4.49	3.95
169295EC	PCBS12X12	Single side	12.0 x 12.0	1	0.5	13.95	12.56	11.30
169308EC	PCBD3X6	Double side	3.0 x 6.0	3	0.1	4.95	4.45	3.95
169316EC	PCBD6X6	Double side	6.0 x 6.0	2	0.2	7.95	7.15	6.45
169324EC	PCBD12X12	Double side	12.0 x 12.0	1	0.7	17.95	15.95	14.49

Fig. 1



Fig. 2

Fig. 3

**DATAK****Dry Concentrated Etchant**

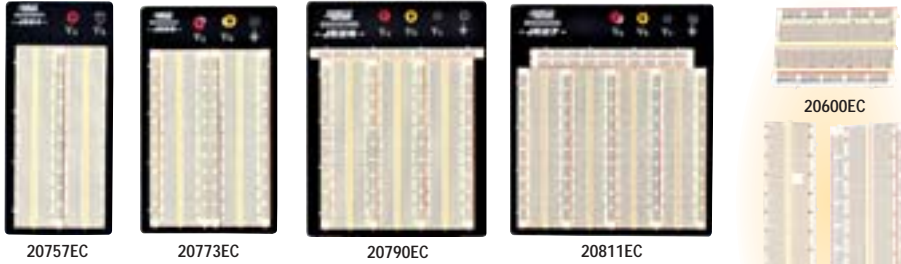
Part No.	Prod. No.	Description	1	10	25
70201EC	ER3	One pint	\$3.95	\$3.49	\$2.95



More @ www.Jameco.com

Miscellaneous Chemical Products on our website.

Solderless Breadboards



These long-lasting solderless breadboards feature screen-printed color coordinates suitable for many types of digital and analog prototyping and circuit design. Larger models feature a heavy-duty aluminum backing with binding posts. Use Jameco's AC/DC breadboard power supply, P/N 77681EC (right).

- Accepts most electronic components, including integrated circuits and transistors for digital and/or analog circuitry • 0.1" hole spacing
- Pins are identified by numbered rows and columns • Ideal for high frequency and low noise circuits
- Low static, plastic body – CMOS safe • Use to breadboard and debug circuit designs
- Nickel-plated clips designed to withstand up to 5,000 insertion cycles
- Breadboard strips connect together to form larger working areas • One-year warranty
- Components are easily interconnected using 20-28 AWG wire (P/N 19289EC & 20079EC, right)
- Some models feature heavy-duty aluminum backings (JE24, JE27)

Attention Educators! Buy jumper wire (right) in bulk and SAVE! (see Hook-up Wire on pg 37)

Part Number	Product Number	Terminal Strips	Bus Strips	Contact Points	Binding Posts	Breadboard Size L x W (In.)	Baseplate Size L x W (In.)	Weight (lbs.)	Pricing			
									1	10	50	100
20600EC	JE21	1	2	400	0	3.3 x 2.1	—	0.13	\$4.95	\$4.49	\$3.95	\$3.49
20669EC	JE22	1	0	630	0	6.5 x 1.4	—	0.20	5.49	4.95	4.49	3.95
20722EC	JE23	1	2	830	0	6.5 x 4.0	6.5 x 2.1	0.30	8.95	7.95	7.25	6.55
20757EC	JE24	2	1	1,360	2	6.5 x 3.1	8.5 x 4.0	0.60	12.95	11.95	10.95	9.95
20773EC	JE25	2	4	1,660	3	6.5 x 4.3	8.5 x 5.1	0.80	18.95	16.95	14.95	13.95
20790EC	JE26	3	5	2,390	4	6.9 x 5.8	9.1 x 6.9	1.10	25.95	23.39	21.05	18.95
20811EC	JE27	4	7	3,220	4	7.3 x 7.5	9.5 x 8.3	1.40	31.95	29.95	27.95	25.95

Digital Design Lab

- Two 7-Segment Displays (digit height: 0.3") • One-year warranty
- Interconnected nickel-plated tie points, fitting all DIP sizes and all components with AWG #22-30 (0.3-0.8mm) solid leads • 1580 tie points

DC Power Supplies

- DC supplies equipped with short circuit protection
- Variable DC power: 0 to +15V & 0 to -15V @ 0.5A
- Fixed power supply: ±5VDC @ 1.0A

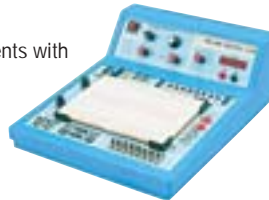
Function Generator (5 ranges)

- Frequency range: 1Hz–10Hz, 10Hz–100Hz, 100Hz–1kHz, 1kHz–10kHz, 10kHz–100kHz
- Sine wave output: 0–8 Vp-p variable • Triangle wave output: 6Vp-p fixed
- Square wave output: ±5V fixed • DCV digital multimeter

Includes: Power cord and manual

Part No.	Description	Size (W" x D" x H")	Weight (lbs.)	1	10	25
75838EC	Digital lab	10.6 x 13.3 x 5.0	8.1	\$276.95	\$249.95	\$226.95

International
115/220VAC
Switchable



Our most popular
digital lab!

Digital-Analog Design Lab

Solderless Breadboard

- 2712 interconnected nickel-plated tie points, fitting all DIP sizes and all components with AWG #22-30 (0.3-0.8mm) solid leads

DC Power Supplies

- Variable DC output: 0 to +15V & 0 to -15V @ 500mA; Fixed DC output: +5VDC, 1A; -5VDC, 300mA • Input power: 120/220VAC @ 50-60Hz (switchable)

Function Generator

- Frequency ranges: 1Hz–10Hz, 10Hz–100Hz, 100Hz–1kHz, 1kHz–10kHz, 10kHz–100kHz
- Sine wave output: 0–8 Vpp variable • Triangle wave output: 0–6 Vpp variable
- Square wave output: 0–8 Vpp variable

Other features:

- 2 variable resistors: VR1=1kΩ, VR2=100kΩ • 8 data switches • 2.5" dia. 8Ω, 25W speaker
- 2 pulse switches (2 sets of outputs: A, A, B, B) • 2 banana sockets, 2 BNC jacks • One-year warranty
- Two 7-segment LED displays (digit height: 0.3") • 8 red LEDs with separate input terminals

Includes: Power cord and manual

Part No.	Description	Size (W" x D" x H")	Weight (lbs.)	1	10	25
136266EC	Digital-analog lab	12.8 x 9.8 x 3.7	8.5	\$379.95	\$341.99	\$307.79



International
120/220VAC
Switchable

Wire Jumper Kit (350 pcs.)

- 25 each of lengths 0.1" through 5.0" (14 sizes)
- 350 assorted lengths in 13 colors
- Pre-stripped/preformed 22 AWG solid wire jumpers



19289EC

19289EC: 350-piece wire jumper kit

- Handy, durable, clear plastic case
- 20079EC: 350-piece refill for 19289EC
- Case not included

SALE

Part No.	Description	1	10	50	100
19289EC	Wire jumper kit ..	\$15.95	\$14.39	\$12.95	\$11.65
20079EC	Refill for 19289EC ..	9.99	8.99	7.99	7.25

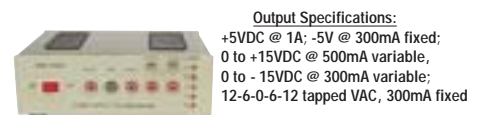
Reinforced Jumper Wires

- 24 AWG-300 volts
- Reinforced pin ends for durability
- 10 pack assortment: 2 each yellow, white, red, black & blue



Part Number	Mfr. Ref. No.	Cross Length (mm / inch)	1	10	100
126341EC	JW100	100 / 3.94	\$4.49	\$4.05	\$3.65

AC/DC Power Supply



Output Specifications:

- +5VDC @ 1A; -5V @ 300mA fixed;
- 0 to +15VDC @ 500mA variable;
- 0 to -15VDC @ 300mA variable;
- 12-6-0-6-12 tapped VAC, 300mA fixed

International 120/220VAC Switchable

With built-in short-proof regulated power supplies.

- Input power: 120/220VAC @ 50-60Hz (switchable)
- Indicator lamps and power fuses
- Just plug-in and start to use
- Compact and lightweight • Color: beige
- For both digital and analog circuits
- Compatible with test leads P/N 77841EC, pg 45
- Size: 7.4"W x 5.5"D x 2.6"H
- Weight: 5.5 lbs. • One-year warranty

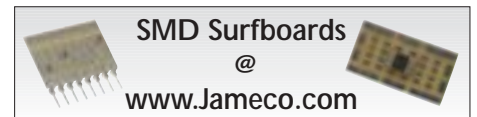
Part No.	Description	1	10	25
77681EC	Power supply	\$119.95	\$109.95	\$99.95

Powered Project Board

- Solderless breadboard with 2420 tie points
- DC power supplies: +5V @ 1A; variable power 0 to +15VDC and 0 to -15VDC @ 500mA
- Back panel has ground terminal
- Outputs are short-circuit protected
- Edge plate for non-DIP size components
- Input power: 120/220VAC @ 50-60Hz (switchable)
- Replacement fuse: P/N 103907EC, pg 29
- Power switch with light • One-year warranty
- Breadboard size: 7.4"L x 6.8"W
- Enclosure size: 9.8"L x 8.0"W x 2.6"H • Wt.: 6.8 lbs.

Includes: Power cord

Part No.	Description	1	10	25
136258EC	Powered breadboard ..	\$99.95	\$89.95	\$79.95



SMD Surfboards

@

www.Jameco.com

General Purpose Prototyping Boards

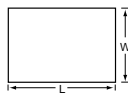
Select the prototype board that fits your needs from our comprehensive product listing. Prototyping boards with punched holes are convenient, economical tools for assembling circuit components and trying cost-effective alternatives to custom designs.

- 0.062" board thickness
- 0.1" hole spacing
- 0.08" pad size
- Plated through pads are double-sided
- PCB material epoxy glass



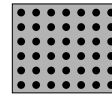
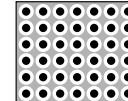
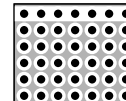
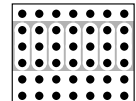
21434EC

Board Outline



21477EC

Circuit Patterns

A
Holes OnlyB
Pad Per HoleC
Power/Ground Perimeter
Bus with Pad Per HoleD
3 Hole Solder Pad
and Bus

See pg 41 for PCB mounting enclosures and hardware (recommend P/N 106551EC)

Part Number	Product Number	Size (W" x L")	Fits Enclosure(s) (see page 41)	Circuit Pattern	Hole Pads	# Holes x Dia. †	Power/Ground Busses	Connector I/O or Edge	# Mounting Holes x Dia.	Weight (lbs.)	Pricing			
											1	10	50	100
105099EC	2855PCB	1.60 x 2.70	18921	B	single-sided	288 x .035"	none	none	2 x .115"	.02	\$4.95	\$4.49	\$3.95	\$3.59
105101EC	5002PCB	1.50 x 3.50	11957	C	single-sided	365 x .038"	4	none	2 x .140"	.02	6.95	6.25	5.59	4.95
28177EC	PCB1	2.42 x 4.10	18913	C	plated through	674 x .040"	none	none	4 x .120"	.04	5.95	5.35	4.79	4.29
105136EC	2320PCB	3.30 x 4.50	11885	C	single-sided	1266 x .035"	4	none	4 x .140"	.06	9.95	8.95	7.95	6.95
105161EC	2852PCB	3.60 x 7.00	18905, 11973	B	single-sided	2225 x .035"	4	none	4 x .140"	.10	14.95	13.45	11.95	10.95
21434EC	JE401(8001)	4.50 x 6.50	18868	B/D	single-sided	2360 x .042"	2	none	none	.12	20.95	18.95	16.95	15.49
21451EC	JE405(8003)	4.50 x 6.50	18868	C	single-sided	2360 x .042"	1	none	none	.12	19.95	17.95	15.95	13.95
21477EC	JE407(8006)	5.00 x 13.25	N/A	B	plated through	6063 x .038"	none	none	8 x .120"	.28	39.95	35.29	33.49	31.85
105187EC	2507PCB	6.10 x 8.80	18876	C	single-sided	4771 x .035"	7	none	8 x .140"	.21	29.95	26.95	23.95	21.95
37621EC	169P84WE	8.50 x 17.0	N/A	A	drilled only	14448 x .042"	none	none	none	.53	23.95	22.75	21.59	20.49

† All 0.042" diameter hole boards use terminals T44, T49, and T421 (see website)

Hardware, Cabinet and Boxes



Hex

.187"/.250" Female

Aluminum & Brass Threaded Standoffs

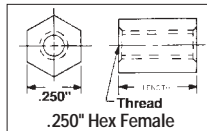
† Finish: Iridite (clear)¹ per MIL-C-5541-D; stainless steel²
* Prepackaged: order in increments of 10, 100 or 1000



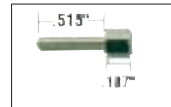
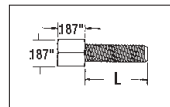
Hex

.250" Male/Female

.250" Hex Female
4-40 Thread .250" Hex



.187 Hex Male/Female
4-40 x .187" Jack Screws and Hex Nut



Part Number	Metal†	Hex Length	Pricing			
			1	10	100	1000
139192EC	Alum ¹	.250"	*	\$.19	\$.14	\$.08
77500EC	Alum ¹	.375"	*	.20	.15	.09
134762EC	Alum ¹	.437"	*	.21	.18	.15
108370EC	Alum ¹	.500"	*	.25	.17	.10
77518EC	Alum ¹	.625"	.45	.35	.23	.14
133604EC	Alum ¹	.750"	.41	.35	.18	.13

169931EC/172603EC/102816EC

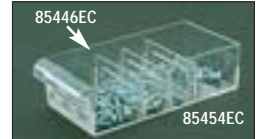
108986EC

Part No.	Description (Brass ²)	1	10	100	1000
169931EC	.275"L jack screws	*	\$.15	\$.13	\$.11
172603EC	.315"L jack screws	*	.17	.15	.14
102816EC	.435"L jack screws	.49	.46	.41	.37
108986EC	.515"L jack screws	.55	.50	.45	.40

Component Cabinet



81701EC



Drawer (85454EC) Divider (85446EC)

- Drawer can be divided into 4 sections (clear)
- Wall mountable cabinet (ABS black)
- Cabinet size: 6.0"D x 15"W x 7.9"H • Wt.: 4.7 lbs.
- Drawer size: 5.5"L x 2.7"W x 1.5"H
- Divider size: 2.4"L x 1.1"H

Includes: 20 clear plastic drawers, 20 dividers and 30 adhesive I.D. labels

* Prepackaged: order in increments of 10 or 100

Part No.	Description	1	10	50
81701EC	Component cabinet	\$15.95	\$13.95	\$12.49
85454EC	Drawer for cabinet	.39	.35	.29
85446EC	Divider for drawer	*	.19	.17

Plastic Fliptop Case for SMDs

128 Compartments for
Surface Mount Components

- 8 rows x 16 columns grid
- Flip top openings on each bin
- Color: gray
- Padded cover locks bins closed
- Perfect match to store P/N 156881EC SMD resistor assortment, pg 13
- Size: 11.0"L x 8.3"W x 1.7"Thick
- Weight: 1.4 lbs.



Includes: Labels for each bin

Part No.	Description	1	10
164267EC	SMD flip top case	\$47.99	\$43.19

Bug Boxes

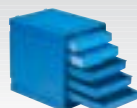
- Anti-static plastic
- Fits in bug cage (P/N 11332EC, see web)
- 11341EC: stores sixty 8-pin or thirty 16-pin DIPs
- 11375EC: Designed to store all types of components
- Box size: 4.9"L x 3.3"W x 0.6"H

11375EC



11341EC

Part No.	Description	1	10	100
11341EC	30 compartments	\$3.95	\$3.49	\$3.15
11375EC	3 compartments/6 vertical & 6 horizontal dividers	4.49	3.95	3.49



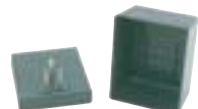
Over 23 More @ www.Jameco.com

Find other Enclosures and Boxes perfect for your applications on our website.



Wall Transformer Enclosures

- Enclosures include 3-prong power plug and cable strain relief
- Material: noryl
- Color: black
- Size: 3.4"H x 2.7"W x 2.3"D



115051EC

Part No.	Style	1	10	100
115051EC	Non-vented	\$2.25	\$1.95	\$1.69
115043EC	Vented	2.25	1.95	1.69

Prototype Builder Boards, Enclosures and Hardware

Call for additional OEM pricing.

The prototype builder boards on this page are specifically designed to fit into our ABS speedy boxes, die cast aluminum enclosures, aluminum boxes, metal cabinets and heavy-duty instrument cases shown in each grouping. These pre-cut boards have 2 or 4 mounting holes compatible with the PC board mounting hardware listed at the bottom, right (P/N 106551EC).

Board description: laminated glass epoxy 1/16" thick fire retardant per FR-4 specs. Copper-clad and solder mask one side. Drilled holes: .035" diameter on .080" square pad. Pads spaced on .10" x .10" grid.



See page 40 and website for hardware and knobs and more printed circuit board details

ABS Speedy Enclosures

Will not crack or split when drilled or punched. PCB mounting slots on all four sides. Lid has a lip for precision fit (adds 0.4" height). Complete with four screws and lid. All sizes below are for interior dimensions. • Color: black • ABS plastic



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
18921EC	H2855	3.1" x 2.0" x 0.9"	0.1 ..	\$2.99	\$2.69	\$2.45	\$2.19
18913EC	H2853	4.9" x 2.5" x 1.5"	0.2	3.15	2.85	2.55	2.35
18892EC	H2851	6.0" x 3.5" x 1.9"	0.4	4.49	4.05	3.65	3.29
18905EC	H2852	7.5" x 4.3" x 2.3"	0.5	6.49	5.85	5.29	4.75

Printed Circuit Boards for Above Enclosures

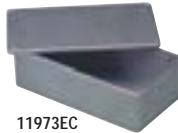
- Power/ground, perimeter bus with pad per hole (*except P/N 105099EC) • Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105099EC*	2855PCB	2.7" x 1.6"	288	\$4.95	\$4.49	\$3.95	\$3.59
105128EC	2853PCB	4.4" x 2.0"	669	7.95	6.95	6.25	5.59
105152EC	2851PCB	5.5" x 3.1"	1450	9.95	8.95	7.95	6.95
105161EC	2852PCB	7.0" x 3.6"	2225 ...	14.95	13.45	11.95	10.95

Die-Cast Aluminum Enclosures

High-quality die-cast aluminum cases come with channeled walls for easy PCB mounting. Ideal for RF circuits because the lid forms an effective screen against RFI interference. Made from aluminum, an excellent heat-sink, these cases are great for high temp circuits (up to 600°C). Complete with screws.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
11957EC	B5002	3.9" x 2.0" x 1.0"	0.2 ..	\$5.95	\$5.39	\$4.85	\$4.35
11965EC	B5004	4.7" x 2.4" x 1.6"	0.4	7.95	7.15	6.44	5.79
11973EC	B5006	7.5" x 4.3" x 2.4"	1.2 ..	13.49	12.15	10.95	9.85

Printed Circuit Boards for Above Enclosures

- Power/ground, perimeter bus with pad per hole
- Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105101EC	5002PCB	3.5" x 1.5"	365	\$6.95	\$6.25	\$5.59	\$4.95
105128EC	5004PCB	4.4" x 2.0"	669	7.95	6.95	6.25	5.59
105161EC	5006PCB	7.0" x 3.6"	2225 ...	14.95	13.45	11.95	10.95

Aluminum Enclosures

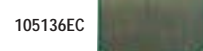
Ideal boxes for those projects that get left lying around! Put them in an economical aluminum enclosure. The enclosure comes in two pieces which slide together.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
11869EC	B2300	4.0" x 2.0" x 2.8"	0.2	\$5.45	\$4.69	\$4.22	\$3.79
11885EC	B2320	5.0" x 4.0" x 3.0"	0.4 ..	7.89	6.15	5.55	4.99
11893EC	B2335	7.0" x 6.2" x 4.6"	0.8	10.95	9.25	8.29	7.49

Printed Circuit Boards for Above Enclosures

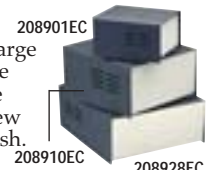
- Power/ground, perimeter bus w/ pad per hole
- Ground Bus • Plated one side holes



Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105110EC	2300PCB	3.4" x 2.4"	637	\$7.95	\$6.95	\$6.25	\$5.59
105136EC	2320PCB	4.5" x 3.3"	1266	9.95	8.95	7.95	6.95
105179EC	2335PCB	6.5" x 5.0"	2829 ...	14.95	13.49	11.95	10.95

Metal Enclosures

High-quality metal enclosures are made to suit a large variety of electronics projects and applications. The base is made of aluminum. Slots are located on the sides of the cases for maximum cooling. Cases screw together and come with an attractive two-tone finish.



- Mounting screws and rubber feet included

Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
208901EC	B2741A	4.0" x 3.3" x 2.2"	0.4...	\$6.49	\$5.89	\$5.29	\$4.69
208910EC	B2743A	5.9" x 5.3" x 3.0"	0.8...	7.99	7.19	6.49	5.89
208928EC	B2744A	7.3" x 6.3" x 2.8"	1.1...	8.99	7.99	7.19	6.49

Printed Circuit Boards for Above Enclosures

- Power/ground, perimeter bus with pad per hole • Plated one side holes

Part No.	Product No.	Size (L x W)	No. of Holes	1	10	50	100
105110EC	2741PCB	3.4" x 2.4"	637	\$7.95	\$6.95	\$6.25	\$5.59
206578EC	2743PCB	4.7" x 4.5"	1869	6.99	6.29	5.69	5.19
105179EC	2744PCB	6.5" x 5.0"	2829 ..	14.95	13.49	11.95	10.95

Heavy-Duty Instrument Cases

Both cases split apart for ease of working. Four plastic feet molded on unit. P/N 18876EC includes ventilation and speaker sound slots. • Color: gray



Part No.	Mfr. Cross Ref. No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
18868EC	H2505	7.9" x 6.3" x 2.5"	0.8	\$7.39	\$6.69	\$5.99	\$5.39
18876EC	H2507	10.0" x 7.5" x 3.1"	1.4 ..	8.99	7.99	7.28	6.55

Printed Circuit Boards for Above Instrument Cases

- Power/ground, perimeter bus with pad per hole • Plated one side holes

Part No.	Product No.	Size (L x W)	Holes	1	10	50	100
105179EC	2505PCB	6.5" x 5.0"	2829	\$14.95	\$13.49	\$11.95	\$10.95
105187EC	2507PCB	8.8" x 6.1"	4771	29.95	26.95	23.95	21.95

ABS Enclosures w/ Clear Tops

Made of gray ABS plastic w/ clear polycarbonate top cover. Includes screws for mounting boards or electronic components, rubber gasket for a tight seal on your equipment & drilled holes for mounting.



Part No.	Product No.	Size (L x W x D)	Wt. (lbs.)	1	10	50	100
141831EC	203C1	4.6" x 3.2" x 1.8"	0.3 ..	\$8.95	\$8.09	\$7.25	\$6.55
141840EC	203D1	6.3" x 3.2" x 1.8"	0.4 ..	9.95	8.99	8.09	7.25
141858EC	203F1	7.0" x 5.5" x 2.5"	0.8	11.95	10.79	9.69	8.69

Mounting Hardware for PC Boards

- 4 spacers, 8 screws and 8 washers



Part No.	Description	1	10	50	100
106551EC	PC board mounting hardware	\$1.79	\$1.65	\$1.45	\$1.35



Fig. 1

3M Adhesive Rubber Feet



Fig. 2

Part No.	Product No.	Type	Fig.	Pack	(W" x H")	1	10	50
142658EC	SJ5012BLKC	Black cylindrical	1	100	.50 x .14	\$5.95	\$5.35	\$4.79
142682EC	SJ5018BLKC	Black tapered square	2	100	.50 x .23	8.95	7.95	6.95

More Enclosures & Accessories @ www.Jameco.com

Omnidirectional Electret Condenser Microphone Cartridges

Applications:

- Tape recorders, intercoms, hearing aids, telephone and answering devices, sonic controlled toys and sensors
- Modems for computers
- Used for recording, testing, and monitoring



116505EC



160979EC



136573EC

Part No.	Type	Sensitivity	Impedance	Frequency (Hz)	Max. Op. Volt. (VDC)	Stand Op. Volt. (VDC)	Current (Max.)	Sensitivity Reduction	S/N Ratio	Terminals	Size (H x Dia.)	Pricing			
												1	10	100	1000
116505EC	WM-54PC	-44 ±2dB	>2.2kΩ	20-16,000	10V	2.5V	0.6mA	-3dB @ 2V	>60dB	PC pin leads	.20" x .38"	\$.75	\$.67	\$.55	\$.49
160979EC	WM-64PKT	-44 ±3dB	>2.2kΩ	20-16,000	10V	2.0V	0.5mA	-3dB @ 1.5V	>58dB	PC pin leads	.10" x .24"	.79	.71	.64	.57
136573EC	WM-60PC	-54 ±2dB	>2.2kΩ	20-12,000	12V	4.5V	0.5mA	-3dB @ 3V	>40dB	PC pin leads	.30" x .38"	.53	.48	.43	.39
140986EC	CRM919	-64 ±3dB	1kΩ ±30%	20-10,000	12V	3.0V	0.8mA	-3dB @ 3V	>40dB	Solder pad	.90" x .39"	1.59	1.43	1.29	1.15

VHF High-Band Wireless Microphones

The perfect microphone for use with portable PA systems, video recording, and stage use. There is no cord to restrict your movements while providing clear crisp sound.

- T.H.D. (total harmonic distortion): less than 0.5% for crystal-clear sound
- Frequency stability: ±0.005% with Quartz controlled
- Maximum deviation range: ±15kHz with limiting compressor
- Carrier frequency range: 100Hz to 15kHz
- S/N ratio: over 180dB @ 15kHz deviation

Includes: 0.25" mono jack patch cable, 9V battery and power supply



198248EC

198221EC

Part No.	Mfr. Cross Ref. No.	Description	Wt. (lbs.)	1	5
198248EC	WR101R	Handheld wireless microphone	2.1	\$119.95	\$99.99
198221EC	WR202H	Wireless microphone with clip-on headset	2.3	99.95	89.95

RCA Audio/Video Cables

- Video/audio applications
- See page 46 for jacks



Part No.	Description	1	10	100
139037EC	5' Y: 1/8" M to 2 RCA M	\$1.99	\$1.49	\$.99
177527EC	6' 3 males to 3 males	4.95	3.75	2.65
29348EC	10' male to male (yellow)	1.69	1.49	1.25

In-Ear Stereo Headphones

- 3.5mm input jack connector
- Typical application: CD player
- Color: gray • 4" Long



Part No.	Description	1	10	100	1000
191880EC	Headphones ...	\$.39	\$.36	\$.32	\$.29

Speakers and Buzzers

Round Ferrite Speakers

- Pre-tinned speaker lugs
- Large magnet
- Anodized metal surfaces
- Paper diaphragm
- Braided copper voice coil leads

135589EC side



135589EC back



Part Number	Mfr. Cross Ref. No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Frequency Range (Hz)	Magnet Size (Dia. " x H")	Pricing		
			Nom	Max					1	10	100
135589EC	FE200	2.0 x 0.7	0.2	0.4	8	83	420 - 5000	1.3 x 0.4	\$1.69	\$1.45	\$.99
177130EC	57RF07	2.2 x 0.8	0.5	0.9	45	88	500 - 8000	1.6 x 0.5	.54	.49	.43

Square Ferrite Speakers

- Pre-tinned speaker lugs
- Freq. range: 300-14000Hz
- Anodized metal surfaces
- Large magnet
- Paper diaphragm
- Braided copper voice coil leads



99995EC side



Part Number	Mfr. Cross Ref. No.	Dimensions (Dia. " x D")	Input (W)		Impedance (Ω)	Output SPL (dB)	Magnet Size (Dia. " x H")	Pricing		
			Nom	Max				1	10	100
99995EC	FEB204	2.6 x 0.9	3.0	4.0	4	95	1.8 x 0.5	\$2.49	\$2.25	\$1.99
171168EC	FEB450SP	4.2 x 1.5	1.0	2.0	8	90	1.8 x 0.6	1.79	1.55	1.39

Buzzers

Magnetic Buzzer



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Part Number	Fig.	Operating Volt. (VDC/mA)	Voltage Range (VDC)	Frequency (Hz)	Sound (dB)	Dimensions	Pricing			
							1	10	100	1000
207984EC	1	1.5/30	1.25 - 2	2300	75	.47"H x .38"Dia.	\$2.49	\$2.19	\$1.99	\$1.69
76064EC	1	5/30	4 - 7	2300	85	.35"H x .46"Dia.	2.99	2.69	2.45	2.19
207976EC	1	12/30	8 - 15	2300	85	.47"H x .38"Dia.	2.49	2.19	1.99	1.69

Piezo Buzzer

Part Number	Fig.	Operating Volt. (VDC/mA)	Voltage Range (VDC)	Frequency (Hz)	Sound (dB)	Dimensions	1	10	100	1000
138712EC	1	12/7	3 - 16	4000	80	.30"H x .54"Dia.	\$2.19	\$1.75	\$1.35	\$.92
207896EC	2	12/120	6 - 15	2800	105	3.4"L x 2.2"W x 1.3"H	8.95	7.95	6.95	6.25
123537EC*	3	24/20	4 - 28	2900	80	1.4"H x 1.7"Dia.	4.19	3.79	3.39	2.95
76021EC	4	24/20	1.5 - 28	3200	95	1.0"H x 1.1"Dia.	4.79	4.35	3.89	3.49

* P/N 123537EC: dual tone

Photovoltaic Solar Panel

- Output connection: conductive film requiring pressure contact or use of 3M conductive epoxy
- Rated 9.5VDC open circuit; 9VDC @ 0.06A in direct sunlight
- Size: 6"L x 6"W x 0.1"T

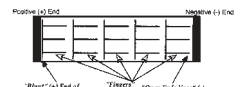


Part No.	Description	1	10	50
141751EC	0.5W solar panel	\$7.95	\$7.19	\$6.45



Flexible Thin-Film Solar Panel

- For recharging NiCad, Nickel Metal Hydride and Gel-cell batteries
- Size: 4.5"L x 1.46"W



Part No.	Output	1	10	100
171061EC	3VDC @ 40-50mA	\$9.19	\$8.29	\$7.49

vellamen Solar Cells

The perfect solar cells for students and experimenters in these rugged cases.

- Connection: lead



215327EC

- 200205EC: 0.5V @ 800mA
- 200221EC: 2V @ 200mA
- 215319EC: 3V @ 100mA
- 215327EC: 6V @ 200mA



200221EC

Part No.	Product No.	Size (LxW)	1	10
200205EC	SOL2	2.6" x 3.7"	\$8.99	\$7.99
200221EC	SOL4	3.0" x 3.7"	8.99	7.99
215319EC	4-3.0-100	3.8" x 2.5"	14.29	12.89
215327EC	4-6.0-50	3.8" x 2.5"	15.79	14.39

Fume Extractors and Filters

Absorbs noxious lead fumes using activated-carbon filter and a high-efficiency fan

- Operate continuously providing filtered air
- Air flow: 115 CFM
- Compact size allows use on work bench with minimum space
- 120VAC, 60Hz, 22 watt
- On/off power switch
- Aerodynamic hood design for effective removal of solder fumes
- Noise: 49dB fan
- Fuse protected
- Static ground jack
- Removable carbon-impregnated filter
- One-year warranty

168268EC:

- High carbon plastic case
- Size: 8.5"W x 5.0"D x 8.0"H • Weight: 4.2 lbs.
- 120150EC: • Black anodized aluminum case
- Size: 6.4"W x 4.6"D x 7.9"H • Weight: 4.6 lbs.

Includes: Detachable power cord

Part No.	Description	1	10	25
168268EC	Fume ext. (ESD safe)	\$59.95	\$53.95	\$49.95
120150EC	Fume extractor	79.95	71.95	64.95
127183EC	Replace. filters (2/pk) ..	10.95	9.95	8.95

Weller® 40-Watt Soldering Station

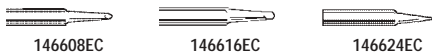
- Lighted on/off switch
- Adjustable power from 5 watts to 40 watts
- 40 watt, 120V @ 60Hz
- Temperature is electronically controlled from 350° to 850°F
- Size: 5.5"L x 4.5"W x 3.5"H • Weight: 1.9 lbs.

Includes: ST3 1/8" screwdriver tip, soldering station and manual

Part No.	Prod. No.	Description	1	10
146595EC	WLC100	Soldering station ...	\$49.95	\$44.95

Weller® Soldering Tips

Replacement Tips for WLC100, WP25 & WP23



Part No.	Prod. No.	Description	1	10
146608EC	ST1	Screwdriver tip 1/16" ..	\$5.95	\$5.35
146616EC	ST3	Screwdriver tip 1/8"	5.95	5.35
192145EC	ST6	Screwdriver tip .031"	5.25	4.75
146624EC	ST7	Conical tip 1/32"	5.95	4.95

Weller® 50-Watt Controlled Output Soldering Station

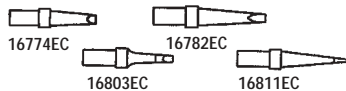
- 50 watts of controlled power
- Temperature lockout prevents raising of temperature to high levels
- Temperature calibration allows user to reset temperature to match tip styles and sizes
- Quick heat-up and temperature recovery
- Temperature range: 350°F - 850°F (177°C - 454°C)
- Accuracy within 9°F (5°C) • Automatic shut-off
- Size: 5.9"L x 4.5"W x 3.6"H • Weight: 4.2 lbs.

Part No.	Prod. No.	Description	1	10
166879EC	WES50	Soldering station	\$115.95	\$105.95

Weller® Soldering Tips

Replacement Tips for WES50

- Tip leakage: less than 2mV
- Tip to ground resistance: less than 2Ω
- Tips also used with WCC100 station
- Additional tips can be special ordered



Part No.	Prod. No.	Description	1	10
16774EC	ETA	Screwdriver 1/16"	\$6.95	\$6.25
16782EC	ETJ	Long screwdriver 1/32" ..	6.95	6.25
16803EC	ETR	Narrow screwdriver 1/16" ...	6.95	6.25
16811EC	ETS	Long conical 1/64"	6.95	6.25

16 to 30-Watt Variable Soldering Iron, Stand & Sponge

- 116572EC: • Length: 7.5"
- 36329EC: • Black anodized steel base - 5.3"L x 3.3"W

- See below for replacement sponge (P/N 134631EC)
- Fits most soldering irons .85" diameter

Includes: Sponge

Part No.	Description	1	10	100
116572EC	Soldering iron	\$18.95	\$17.09	\$15.35
36329EC	Soldering stand	4.25	3.85	3.45
134631EC	Sponge (for 36329EC)	2.99	2.69	2.49

Weller® Professional 25-Watt & 35-Watt Soldering Irons

- Interchangeable heater elements
- Lightweight handle with cushioned grip
- Quick change knurled collar
- Length: 9"
- 120VAC @ 60Hz

Includes: Power cord & ST3 tip (left)

Part No.	Prod. No.	Description	1	10
170587EC	WP25	25W solder iron ..	\$29.99	\$26.99
192102EC	WP35	35W solder iron	39.95	35.95
192153EC	PH25	Solder iron stand ...	15.95	14.55



SMD Tweezer Iron

- Maximum efficiency ceramic heating elements insures rapid heat-up and instant heat recovery
- Max. temp.: 760°F
- 120VAC
- Heater insulation exceeds 100MΩ
- Heater power consumption: 35W x 2

Includes: 0.095" tip

Part No.	Description	1	10	25
168410EC	Tweezer iron	\$59.95	\$53.95	\$48.95
168583EC	Tip .078"	11.95	10.79	9.69
168591EC	Tip .590"	12.95	11.69	10.49

Electric Desolder Pump

- Easily disassembled for cleaning
- One-hand operation
- Replacement tips available
- UL listed
- Size: 10.5"L x 1.0"Dia.

Part No.	Description	1	10
19254EC	Electric desolder pump	\$26.95	\$23.95
19262EC	1 tip for 19254	4.95	4.49



One-Shot Desoldering Gun

This low maintenance desoldering gun with self-contained vacuum pump is perfect for desoldering through-hole components.

- Power consumption: 60W
- Interchangeable standard tips
- Zero static tip, 3 wire grounded
- Sensitive where CMOS protection is needed
- Quick release stainless solder collector
- Electronic temperature control
- Ergonomic, lightweight design
- 120VAC • One-year warranty
- Gun casing size: 7.0"L x 4.0"W • Weight: 2.2 lbs.

Includes: 1.0mm tip

Part No.	Description	1	10	25
129066EC	Desolder gun	\$99.95	\$89.95	\$79.95
140214EC	"Y" replacement tip ..	10.95	9.95	8.95
134594EC	1.0mm replace. tip	8.95	7.95	7.19
134607EC	1.2mm replace. tip	8.95	7.95	7.19

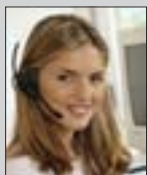
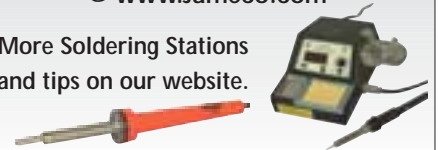
PANAMISE Electronic Work Center

- Circuit board holder, standard base, tray base mount, solder station, sponges and wire holder included
- Size: 8.5"W x 7.8"H
- Weight: 5.3 lbs.
- One-year warranty

Part No.	Description	1	5	10
27060EC	Electronic center	\$74.95	\$71.25	\$66.95

Discover what you are looking for
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More Soldering Stations
and tips on our website.



Don't worry about backorders. Over 99% of our products are in stock!

We'll Send It Today!

Just place your order by 6PM EST for same business day shipment.



Analog Display Soldering Stations

Maintains a steady temperature using a cartridge heating element, providing a longer life for the solid soldering tip.

- Electronic temperature control: 300°F to 850°F
- CMOS devices protected against voltage spikes
- Power consumption: 60W
- Weight: 4.1 lbs.
- Size: 4.3"W x 6.0"D x 3.4"H

Includes: One 1/16" tip

Part No.	Product No.	Description	1	10	25
114569EC	168-3C	Analog display station	\$94.95	\$84.95	\$76.95
183177EC	XY9-60A	Analog display station	99.95	89.95	79.95
134640EC	SP815	Replacement sponge for P/N 114569EC	2.99	2.69	2.49
134631EC	SP715	Replacement sponge for P/N 183177EC	2.99	2.69	2.49



Desoldering & Soldering/Desoldering Stations

- Simple fine tune feature to select 300–850°F range
- Vacuum pump activated "on demand" using finger tip switch on desolder handle
- CMOS devices protected against voltage spikes
- Replacement sponge for P/N 125516EC – see above (P/N 134631EC)
- One-year warranty

125508EC: Size: 9.2"L x 7.2"W x 3.6"H; Weight: 13.1 lbs.

Includes: 3/64" conical tip and solder holder

125516EC: Size: 11"L x 10"W x 4.0"H; Weight: 18.1 lbs.

Includes: 1/32" conical tip, solder holder, tip cleaner and tweezers

Part No.	Product No.	Description	1	10	25
125508EC	968	Desoldering station	\$309.95	\$278.95	\$251.95
125516EC	988	Soldering/desoldering station ..	409.95	368.95	331.95
207271EC	TWZ60ESD	SMD tweezer iron w/ .078" tip	69.95	62.95	56.95
207221EC	D1A60A	Replacement desoldering iron ...	74.95	67.49	59.95
168583EC	46-060102	Tip .078" for P/N 207271EC	11.95	10.79	9.69
168591EC	46-060115	Tip .590" for P/N 207271EC	12.95	11.69	10.49

Special 5% Bundle Bonus
Complete digital solution for an ISO 9000 Soldering/Desoldering Station – P/N 125508EC & 162456EC Sold separately \$439.90
Combined: P/N 207263EC \$407.95

Temperature Controlled 45-Watt Soldering Station

Grounded Soldering Tip

- 500°F to 850°F • Fully grounded
- Insulated ceramic heating element for rapid heat-up and heat recovery • Wt.: 2.5 lbs.
- Heater insulation exceeds 100MΩ
- Zero voltage circuitry eliminating high voltage spike and magnetic field generation • Size: 7.0"L x 4.5"W x 3.5"H

Includes: Manual and 1.2mm diameter conical tip

Part No.	Product No.	Description	1	10	25
156785EC	379	Soldering station	\$69.95	\$62.95	\$56.95
156814EC	XYB01	Sharp conical 1/32" tip	4.95	4.49	3.95
156822EC	XYB04	Conical chisel 1/16" tip	4.95	4.49	3.95
134631EC	SP715	Replacement sponge for P/N 156785EC	2.99	2.69	2.49



Digital Display Soldering Station

Designed for soldering situations where precise temperature is required for sensitive components.

- Temperature is maintained at ±6°F
- Electronic temperature control from 392° to 878°F
- External calibration port
- CMOS devices protected against voltage spikes
- Power consumption: 60 watts
- Power-on and Heater-on LED indicators
- Size: 5.1"W x 8.0"D x 4.0"H • Weight: 4.8 lbs.

Includes: One 1/16" tip

Part No.	Product No.	Description	1	10	25
162456EC	XY9-60D	Soldering station with ESD	\$129.95	\$116.95	\$104.95
168401EC	TWZ50ESD	SMD tweezer iron w/ 0.078" tip	79.95	71.95	64.95
168583EC	46-060102	Tip .078" for P/N 168401EC	11.95	10.79	9.69
168591EC	46-060115	Tip .590" for P/N 168401EC	12.95	11.69	10.49
134631EC	SP715	Replacement sponge for P/N 162456EC ..	2.99	2.69	2.49

More @ www.Jameco.com

See our website
for additional Soldering,
Desoldering Tools & Accessories.

Rosin Core Solder Rolls

32117EC 141778EC



Part No.	Mfr.	% Composition			Dia. (In.)	Wt. (lbs.)	Pricing			
		Tin	Lead	Silver			1	10	50	100
32117EC	Kester	60	40	0	.031	1.00	\$13.19	\$11.89	\$10.69	\$9.59
141778EC	Super	60	40	0	.031	2.20	13.95	12.95	11.95	10.95

300-Watt Solder Pot

Temperature Regulated between 420 – 450°C

- HI/LO switch selectable for temperature
- 2 conductor power cord; 5' 9" long
- Holds up to one 1.1 lbs. solder bar
- Input voltage: 110VAC @ 2.7A; 50-60Hz
- Size: (unit) 4.8"H x 5.5" Dia. (base)
- Size: (tub) 2.4"Dia. x 1.6"D

Part No.	Description	1	10	25
160303EC	300W solder pot	\$64.95	\$58.49	\$52.65

600-Watt Solder Pot

Temperature Adjustable

- Tin boiler temp.: 0°C to 500°C
- Input voltage: 110VAC @ 5.5A
- Holds up to three 1.8 lbs. solder bars
- Size (unit): 3.9"L x 1.6"D; (tub): 6.8"L x 5.5"W x 2.8"H

Includes: Skimmer and removable dross tray

Part No.	Description	1	10
172275EC	600W solder pot	\$189.95	\$159.95

Soldering Tip Cleaner with Stand and Rosin Paste Flux

156777EC:

- For cleaning soldering iron tips without the use of water and sponge
- Metal wool for cleaning
- Rubberized base for stability

73584EC:

Highly active non-corrosive and non-conductive flux with excellent wetting action

Part No.	Description	1	10	50
156777EC	Tip cleaner & stand	\$4.95	\$4.49	\$4.05
160004EC	Metal wool replacement ..	2.79	2.49	2.29
73584EC	Rosin paste flux (2 oz.) ..	1.79	1.65	1.45

More Anti-Static Products

@ www.Jameco.com

Protective Coiled Grounding Wrist Strap

- Comfortable, adjustable Velcro wrist strap
- The coiled cord has banana plug and alligator clips
- Extended cord: 9' long
- Color: black

Includes: 1MΩ resistor for added safety

Part No.	Description	1	10	100
34551EC	Anti-static strap	\$6.49	\$5.85	\$5.29

Anti-Static Work Mats

Make your work environment safe from static discharge! These mats are made of attractive semi-conductive vinyl that provide adequate discharging, yet will not short leads or pins.

• Color: gray
Includes: Grounding clip

Part No.	Dimensions	Wt. (lbs.)	1	10	100
168508EC	24" x 28"	1.8 ..	\$18.95	\$17.09	\$15.35

Pomona® Stackable Banana Test Lead Cables



• 5000V @ 15A • 55°C max.
159919EC: Two 36" leads, mini clip w/ banana
 • 45VAC @ 5A max.; beryllium copper contact and glass filled insulation
159901EC: Two 24" leads **159919EC:** Two 36" leads

Part No.	Prod. No.	Description	1	10	25
159898EC	3782-36	Mini w/ banana	\$7.95	\$6.95	\$6.25
159901EC	B-24-02	Patch cord	9.95	8.95	7.95
159919EC	B-36-02	Patch cord	9.95	8.95	7.95

Banana to Banana Test Leads

• Stackable
 • Color coded; 2 each red, yellow, blue, black, white • 9.8" long
 • 10 per package
 • 18 AWG wire

Part No.	Description	1	10	25
77841EC	Test leads	\$22.95	\$20.69	\$18.59

BNC to Alligator Clip Test Cable

Permits BNC assembly to be used as a test cable.
 • Upper connection: two alligator clips – red 5.5" 22AWG wire; black 9" 22AWG wire
 • Lower connection: 23" RG/58U cable with BNC connector

Part No.	Description	1	10	100	1000
11383EC	BNC cable	\$3.49	\$2.49	\$2.25	\$2.05

1 1/16" Banana Plugs

• Set-screw connection
 • Standard banana spring plug
 • Additional 6-32 threaded hole for connection reliability
 • .1875" lead opening
 • Insulating sleeve is threaded to banana plug body
 • Size: 1.6"L x 0.4"Dia.
Includes: One red and one black plug

Part No.	Description	1	10	100	1000
72194EC	Banana plugs	\$1.59	\$1.49	\$1.25	\$1.09

Double Banana Plugs

• Dual gold-plated female banana plugs
 • Stackable

Part No.	Description	1	10	100
125209EC	Blk banana connector ...	\$2.39	\$2.15	\$1.89
125217EC	Red banana connector ...	2.39	2.15	1.95

Mini Test Clips

• Two lengths
 • One black and one red hooked probe clip

Part No.	Description	1	10	100
114809EC	1.75" mini test clips ...	\$1.89	\$1.49	\$1.35

Mini-Clip Test Leads

These spring loaded mini-clips hook easily to IC pins for testing.
 • Set of five: red, blue, green, black and yellow
 • 14"L; clips on both ends
 • 26 AWG to 300V CSA/UL approved wire

Part No.	Description	1	10	100	1000
135298EC	Mini test leads	\$11.49	\$10.39	\$9.29	\$8.39

BNC to Clip Test Cable

BNC connectors are designed for signal frequencies into the gigahertz range, making them ideal for communications, video and test equipment.
 • Mini-clip • Length: 39"

Part No.	Description	1	10	50	100
11463EC	Mini-clip RG174 ...	\$4.39	\$3.99	\$3.59	\$3.19

Handheld Oscilloscope and Multimeter

Six Units in One!
 • 4,000 count True RMS DMM
 • 1MHz bandwidth oscilloscope
 • 20MHz sampling rate
 • Logic test • Frequency counter
 • Trend mode allows recording of sine waves for a period of time
 • Component test
 • Three-year warranty
Includes:
 AC charger, test leads and manual

Part No.	Description	1	5
160805EC	440 digital oscilloscope	\$349.95	\$339.95
168330EC	RS-232 software and cable...	69.95	62.95

We'll match the advertised price of any like product.

PC-MultiScope 100MHz Dual-Channel DSO



mission technology
 • 100MHz sampling; dual channel
 • Chart recorder and FFT mode
 • 5mV to 5V per div.; 20MHz bandwidth; ext. trigger
 • 0-4MHz sine and square wave signal generator
 • Triple power supply; 5VDC @ 500mA and ±0-8VDC @ 250mA
 • One-year warranty
Includes: Parallel port cable, AC adapter, alligator clip probe, Windows® 3.1/95/98 software

Part No.	Description	1	10
163230EC	PC-MultiScope 3	\$579.95	\$529.95

Digital Handheld Oscilloscope

• 5MHz for repetitive signals; 0.5MHz for single shot events
 • Input impedance: 1MΩ/20pF
 • Maximum input voltage: 100V peak (AC + DC)
 • Input coupling: DC, AC, and GND (GND for auto zero reference)
 • LCD graphics display: 64 x 128 pixels (64 x 96 pixels for signal)
 • High contrast LCD display with 3.3" viewing angle
 • Vertical resolution: 8-bit (6-bit for LCD)
 • Timebase range: 2µs to 20s/div
 • Input sensitivity: 5mV to 20V/div • Screen hold
 • Trigger mode: run, normal, once, and ± slope
 • True RMS and dB measurements • Linearity: ±1 bit
 • Recommend 9VDC @ 300mA power supply (P/N 133891EC, pg 21)
 • Batteries not included, recommend P/N 32627EC or P/N 151087EC, see website
Includes: Insulated BNC to alligator clip measurement probes and case

Part No.	Description	1	5
168823EC	5MHz scope (Model HPS5)	\$168.95	\$158.95

Modular Oscilloscope Probes

• 60MHz, 100MHz, 250MHz
 • Hook and pointed probes
 • 216047EC/140687EC: with IC test ground cover and spring ground contact
 • Alligator clip ground wire
 • Maximum input voltage: 600V
 • BNC male connector
 • Length: 5'

Part No.	Mfr. Cross Ref. No.	Bandwidth (±3dB)		Impedance (R/C) *		Pricing		
		Attenuation		Attenuation		1	10	50
		x1	x10	x1	x10			
22891EC	LF101E	6MHz	60MHz	1MΩ/180pF	10MΩ/22pF	\$22.95	\$20.79	\$18.69
216047EC	HF-9100	6MHz	100MHz	1MΩ/47pF	10MΩ/16pF	34.95	29.95	26.95
140687EC	LF290	6MHz	250MHz	1MΩ/150pF	10MΩ/14pF	45.95	41.39	37.25

* with oscilloscope input 20pF

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See our website for other Test Leads and Binding Posts.

EZ DIGITAL

20MHz Dual-Trace Oscilloscope



Blue CRT for higher resolution!

SALE



- 6" rectangular high-resolution blue CRT with internal graticule & scale
- Vertical deflection: 5mV/div to 5V/div in 10 calibrated steps
- Horizontal deflection: 0.2μs/div to 0.2s/div in 19 calibrated steps, 1-2-5 sequence
- Max. signal input voltage: 250V (DC and peak AC)
- ADD function measures sum of two signals
- Input voltage: 98-125VAC @ 1A, 198-225VAC @ 0.5A, 50-60Hz, 45W

Includes: Two X1/X10 40MHz probes, power cord, manual, and block diagram

Part No.	Prod. No.	Description	1	10
136098EC	OS5020	20MHz scope.....	\$399.95	\$359.99

EZ DIGITAL

20MHz Dual-Trace Oscilloscope with 1MHz Function Generator

- Basic specs same as 136098EC (above)
- 7 function generator
- Frequency range: sine, triangle, square, TTL pulse
- Output impedance: 50Ω
- Output voltage: 14Vp-p



2 Instruments in 1

Part No.	Product No.	Description	1	10
94650EC	OS5020G	Func. gen.	\$529.95	\$499.95

Handheld 20MHz Digital Oscilloscope & Multimeter

- 4-in-1 test equipment: digital oscilloscope, DMM, frequency counter and logic analyzer
- **Oscilloscope:** 2-channel input, 5mV-2V/div; DC-20MHz(-3dB); 50ns - 0.5μs/div; 20 MS/s sampling rate
- **Logic analyzer:** 8 inputs; 1.4V threshold level; 35VDC max. input; 50ns min. pulse width
- **Digital multimeter:** 3999 counts; 40 segment analog bargraph; AC/DC voltage from 400mV-600V; AC current from 40μA-400mA; DC current from 400μA-400mA; resistance from 400Ω-40MΩ; continuity & diode testing
- **Frequency counter:** 5Hz-20MHz; 5 digit max.; AC/DC/DC input coupling; 35Vrms/42V-P/60VDC max. input
- Probes use P/N 22891EC/66149EC/140687EC, pg 45

Includes: Manual, 5VDC @ 3A power supply, power cord, DMM test leads, holster and case

Part No.	Description	1	5
162430EC	20MHz digital scope	\$799.95	\$749.95
162974EC	Logic probe	59.95	53.95
163141EC	Rechargeable batt. (portable use)	45.95	41.49
162966EC	RS-232 cable and software	26.95	24.25



(Shown w/ logic probe P/N 162974EC - not included)

100MHz Dual-Trace Oscilloscope

- 2-channel dual trace
- Delay line
- Auto focusing according to the change of intensity

EZ DIGITAL



Part No.	Product No.	1	5
121179EC	OS5100	\$1,195.95	\$1,075.39

2-Channel, 1.5GHz Frequency Counter

- Frequency, period, totalize, RPM
- Gate time: 0.01s, 0.1s, 1s, 10s
- 9-digit green LED display
- Input power: AC 110V/220V ±10%, 50-60Hz

Includes: Fuse, manual and BNC cable

Channel	Frequency Range	Resolution
A	0.1Hz-150MHz	0.1nHz-10kHz
B	50MHz-1.5GHz	0.1Hz-100kHz

Part No.	Product No.	1	5
55790EC	FC7150	\$299.95	\$259.95



FLUKE

Scopemeter® 123

- Dual input 20MHz digital oscilloscope
- Two 5,000 count True RMS digital multimeters
- Dual-channel TrendPlot paperless recorder
- Connect-and-View trigger simplicity for hands-off operation
- Three-year warranty
- CAT III 600V



Part No.	Model No.	Price
160661EC	Fluke 123/003SR	\$1,195.00

METEX® 4-in-1 Universal System
With Function Generator, Universal Counter, DC Power Supply & Digital Multimeter

- Generate 7 forms of waves in 7 frequency ranges from 0.2Hz to 2MHz
- Measure frequency ranges from 5Hz to 1.3GHz
- Generate 5V @ 2A, 15V @ 1A fixed and 0 to 30V @ 0 to 2A variable
- Ranges: DC voltage (400mV to 100V), AC voltage (400mV to 750V), DC/AC current (40mA to 20A), resistance (400Ω to 40MΩ), capacitance (4nF to 400μF) and forward resistance of a semiconductor junction in kΩ
- Size: 14.5"W x 14.0"D x 7.0"H • Weight: 37 lbs.

Includes: Manual, cables and software

Part No.	Product No.	1	5
160864EC	MS9150	\$549.95	\$499.95



Save bench space & \$800!

Visit www.Jameco.com/DMM

For our complete selection of Digital Multimeters.



2MHz Function Generator and 2.7GHz Frequency Counter

Function Generator: (2Hz - 2MHz)

- Wave forms: sine, square, triangle, skewed, ramp, pulse & TTL level square
- Frequency: 2Hz to 2MHz in 7 ranges
- Output impedance: 50Ω ±10%
- Output amplitude: 2 to 20Vpp at open load; 1 to 10Vpp at 50Ω load
- Offset variable range (max.): ±10VDC at open load
- Frequency sweep time: 20ms to 2s

Frequency Counter: (5Hz - 2.7GHz)

- Measuring range: channel A: 1Hz to 20MHz; channel B: 20MHz to 2.7GHz
- Input sensitivity: channel A: 20mVRMS sine wave or 100mVp-p; channel B: 40mVRMS for 20MHz to 1.3GHz; 70mVRMS for 1.3GHz to 2.7GHz
- Max. input voltage: channel A: 35Vp-p; channel B: 3Vp-p
- Input impedance: channel A, 1MΩ; channel B, 50Ω

Includes: Coax & power cable, manual and software

Part No.	Description	1	5
192671EC	Function generator/counter	\$325.95	\$293.39



17MHz Logic Probe

- Max input frequency: 17MHz
- Minimum pulse width: 30ns
- Input impedance: 1MΩ
- Pulse flash time: 500ms
- Audible tones for high and low
- Power supply protection: ±20V
- TTL threshold: (Lo) 0.8V ±0.2V, (Hi) 2.3V ±0.2V
- CMOS threshold: (Lo) 30% VCC, (Hi) 70% VCC

Part No.	Description	1	10	25
149930EC	Logic probe	\$29.95	\$26.99	\$24.29



BK PRECISION

150kHz Sine/Square-Wave Audio Generator

Small and convenient, this audio generator can be used to test telco and audio equipment.

- 20Hz to 150kHz in 46 steps
- Low distortion R-C oscillator
- Variable output control
- Size: 5.9"L x 3.2"W x 0.8"H
- Output Impedance: 600Ω

Includes: 9VDC battery

Part No.	Prod. No.	Description	1	10
166334EC	BK3001	Audio generator...	\$78.95	\$71.95



2MHz Function Generator

- Frequency range: 0.02Hz to 2MHz
- Waveforms: sine, triangle, square, ramp, TTL pulse, skewed sine
- Variable waveform/duty cycle symmetry
- DC offset voltage from 0 to ±10V; can be superimposed to output waveform
- Output voltage: 20Vp-p (open circuit), 10Vp-p (into 50Ω)
- Input voltage: 110V/220V 50-60Hz

Part No.	Product No.	1	5	10
66069EC	FG8002	\$189.95	\$179.95	\$169.95



250-Watt Analog Power Supply

50VDC @ 5A

- Adjustable voltage/current outputs
- Constant voltage and current operation
- Color-coded adjustment knobs for voltage, current, and fine tuning
- Color-coded terminals for ground, positive, negative
- 5A @ 250V fuse • Isolated ground
- Input voltage: 110VAC @ 50-60Hz
- Color: dark gray
- Size: 4.9"L x 7.7"W x 6.7"H • Weight: 13.8 lbs.



Part No.	Mfr. Cross Ref. No.	1	10	25
175249EC	DPS5050	\$189.95	\$179.95	\$171.49

190-Watt Triple Output Power Supply

Digital Display

- Output voltage: 0 to +30VDC @ 3A
0 to -30VDC @ 3A
+5VDC @ 2A
- Ripple voltage: less than 3mVp-p
- Volt and current meter: LED display ($\pm 1\% + 1$ digit) • Overload protection circuit
- Input voltage: 100VAC-230VAC @ 50-60Hz (switchable)
- Includes: Manual and spare fuse



Part No.	Product No.	1	5
157518EC	GP4303TP	\$549.95	\$529.95

150-Watt Digital Power Supply

30VDC @ 5A

- Adjustable voltage/current outputs
- Constant voltage and current operation
- LCD displays for both current and voltage
- Coarse and fine adjustment knobs for current and voltage
- Color-coded terminals for positive, negative and ground connections
- 2A @ 250V fuse • Dual digital display
- Input voltage: 110/220VAC @ 50-60Hz (switchable)



Part No.	Description	1	10	25
153242EC	30VDC @ 5A ...	\$219.95	\$197.99	\$178.19

225-Watt Analog Power Supply

15VDC @ 15A

- Output voltage: 9VDC to 15VDC
- Output current: 25A max. (22A continuous @ 13.8VDC)
- Constant voltage
- Over-voltage protection @ 16.5V
- Short-circuit protection @ 27.5A
- Color-coded adjustment knob and output terminals for voltage • Built-in fan
- Cigarette lighter plug for current output
- Power and fan LED indicator • Weight: 3.8 lbs.
- Voltage and current panel meter
- Input voltage: 110VAC/220VAC @ 47-63Hz (switchable) • Size: 5.6"L x 6.2"W x 4.0"H



Part No.	Mfr. Cross Ref. No.	1	10	25
175257EC	SPS250A	\$169.95	\$152.95	\$144.95

150-Watt Analog Power Supply

50VDC @ 3A

- Adjustable voltage/current outputs
- Constant voltage & current operation
- Color-coded terminals for ground, positive and negative terminals
- 3A @ 115V fuse
- Color-coded adjustment knobs for voltage, current and fine adjustment
- Input voltage: 110VAC @ 60Hz
- Size: 9.0"L x 4.75"W x 7.5"H • Weight: 12.3 lbs.



Part No.	Description	1	10	25
163723EC	50VDC @ 3A	\$159.95	\$144.95	\$137.95

150-Watt Linear Power Supply

15VDC @ 10A

- Output voltage: 2VDC to 15VDC
- Output current: 15A max.
- Constant voltage and current operation
- Color-coded terminals for positive and negative terminals, voltage adjustment knob
- Overvoltage, overcurrent, short-circuit protection
- Cigarette lighter output current plug
- LED indicator for power and warning
- Current and voltage panel meter
- Built-in fan • Input voltage: 110VAC @ 60Hz
- Size: 5.7"L x 6.2"W x 4.0"H • Weight: 12.0 lbs.



Part No.	Mfr. Cross Ref. No.	1	10	25
175265EC	DPS150A	\$149.95	\$134.95	\$129.95

100-Watt Digital DC Power Supply

30VDC @ 3A

- Triple output with fixed 5VDC @ 0.5A, 12VDC @ 0.5A
- Adjustable 0 – 30V voltage and 0 – 3A current outputs
- Displays of both voltage and current
- Constant voltage or current
- Current limiting indicator
- Overload and short circuit protection
- Binding post terminals for variable supply
- Input voltage: 110/220VAC @ 50-60Hz (switchable)
- Size: 9.5"L x 6.0"W x 5.6"H • Weight: 10 lbs.



Part No.	Description	1	10
197991EC	Digital DC	\$198.95	\$178.95

90-Watt Analog DC Power Supply

30VDC @ 3A

- Constant current and constant voltage operation
- Can be used for positive or negative source
- Overload protection circuit
- Input voltage: 100-240VAC @ 50-60Hz
- Size: 5.2"W x 5.6"H x 10.0"D
- Weight: 10.9 lbs.



Part No.	Product No.	Description	1	10
101928EC	GP4303A	Analog DC ..	\$189.95	\$169.95

Logic Pulser

- Compatible with TTL, DTL and CMOS ICs
- 1M Ω sync input impedance
- "One shot" or continuous 5Hz train pulse
- Pulse repetition rate: 0.5pps/400pps
- Pulse width output at 100mA load: 10 μ s
- Pulse mode output current: 10mA
- Square wave current output: 5mA
- Size: 7.8"L x 1.0"W x 0.6"H



Part No.	Description	1	10	25
24601EC	Logic pulser	\$19.95	\$17.95	\$15.95

DMMs

C550 Tool Bag

- Steel reinforced frame
- Rugged ballistic cloth with heavy duty hardware
- Large zippered storage compartment with 25 pockets



Part No.	Model No.	Price
214383EC	25-pocket tool bag	\$60.00

Digital Multimeter Quick Selection Guide

See page 48

Fluke 175/179 6000-Count Digital Multimeters

- Min./max./average functions
- Auto hold and manual hold
- IEC 1010 rating Cat IV 600V/ Cat III 1000V
- Resolution: 100 μ V maximum
- DC/AC voltage ranges: 600mV – 1000V
- DC/AC current ranges: 60mA – 10A
- Resistance ranges: 600 Ω – 50M Ω
- Also capacitance and frequency
- Size: 6.3"L x 3.3"W x 9.2"H
- Weight: 1.5 lbs.
- 185535EC (Fluke 179): • Temperature: -40 to +400°C



Part No.	Model No.	DC Accuracy	1	5
192655EC	Fluke 175	0.15%	\$168.95	\$159.95
185535EC	Fluke 179	0.09%	208.95	198.49

WAVETEK® Metorman® VT201 Non-Contact Voltage Detector

- Both visible and audible voltage indicators
- 70-440VAC range
- Detects AV voltages with no electrical contact



Part No.	Description	Price
214447EC	Non-contact voltage detector	\$9.95

Order Anytime 24 x 7 x 365

www.Jameco.com

Phone: 1-800-455-6119 Fax: 1-800-237-6948

Order 24/7 Toll Free 1-800-455-6119

JAMECO®

Digital Multimeter Quick Selection Guide

All have VDC, VAC, Resistance and Current

* See indicated page for more details on each product

Handheld Digital Multimeters														
		Features		Standard Functions		Special Functions								
Manufacturer No. Part No.	Best Sellers	Display Count	Analog Bar Graph	RS-232 PC Interface	Autorange	Capacitance	Inductance	Frequency	Temperature	Diode Test	Logic Test	Continuity Test	Transistor h _{FE} Test	Price
27115EC	✓	Metex M3800	Right	2000										\$35.95
119212EC	✓	JE110	Below	2000							✓		✓	19.95
192647EC	✓	Wavetek 10XL	Below	2000							✓		✓	49.90
177480EC	✓	AEEC2890	Below	2000			✓				✓		✓	49.95
155483EC		Metex ME-21	Right	2000	✓	✓				✓	✓	✓	✓	59.95
147096EC		BelMerit DX460L	Below	2000				✓	✓	✓	✓	✓	✓	99.95
155475EC		Metex ME-22	Right	2000	✓	✓				✓	✓	✓	✓	79.95
155491EC		Metex ME-22T	Right	2000	✓	✓	✓			✓	✓	✓	✓	89.95
137461EC	✓	Metex M3860D	Below	4000	✓	✓	✓	✓	✓	✓	✓	✓	✓	149.95
192655EC		Fluke 175	47	6000	✓	✓	✓	✓			✓			168.95
185535EC	✓	Fluke 179	47	6000	✓	✓	✓	✓	✓	✓	✓			208.95
136590EC	✓	Mastech MY65	Right	20,000					✓				✓	69.95
185201EC		B&K BK5380	49	50,000	✓	✓	✓	✓		✓	✓	✓	✓	149.95
182043EC		Fluke 189	Below	50,000	✓		✓	✓	✓	✓	✓	✓	✓	398.95
Bench-Type Digital Multimeters														
132564EC		DM441	49	20,000					✓		✓		✓	219.95
166852EC		Metex MXD4660A	49	20,000	✓	✓		✓		✓		✓	✓	249.95

Fluke 189 50,000-Count Multimeter w/ Data Logging

- Digital and analog bar graph display
- Backlight with 2 brightness levels
- Fast auto range • AC/DC true RMS
- Resolution: 1µV maximum
- DC/AC voltage ranges: 50mV – 1000V
- DC/AC current ranges: 500µA – 10A
- Also capacitance, frequency and temperature
- Conductance, diode testing and continuity function capable
- Data logging: 288 intervals stored; 100 readings • Weight: 2.0 lbs.
- Size: 8.0"L x 3.9"W x 2.0" Thick



FLUKE

Part No.	Model No.	Resis. Ranges	1	5
182043EC	Fluke 189	500Ω-30MΩ	\$398.95	\$378.95

2000-Count Pocket Multimeter

- DC voltage ranges: 200mV, 2V, 20V, 200V, 1000V
- AC voltage ranges: 200V, 750V
- DC current ranges: 200µA, 2mA, 20mA, 200mA, 10A
- Resistance ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ
- Diode and continuity test
- 0.5" digit height
- Removable test leads • Size: 2.6"W x 1.0"D x 4.8"H

Includes: 9V battery

Part No.	Description	1	10	50
119212EC	Pocket multimeter	\$19.95	\$17.95	\$16.19



2000-Count Multimeter

With Temperature & Frequency Measurement

- 3½-digit LCD (1.0" digit height)
- Resolution: 100µV maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 200mV – 700V
- DC/AC current ranges: 200µA – 10A
- Resistance ranges: 200Ω – 200MΩ
- Capacitance ranges: 2nF – 20µF
- Frequency: 20kHz • Wt.: 1.6 lbs.
- Temperature range: -20°C – 1000°C
- Diode, transistor and continuity testing
- Data hold switch • Size: 4.0"W x 2.0"D x 8.0"H

Includes: Manual, probes, and 9V battery

Part No.	Mfr. Cross Ref. No.	1	10
177480EC	AEEC2890	\$49.95	\$44.95



BelMERIT 2000-Count Multimeter

- DC voltage ranges: 200mV-1000V
- Function and range annunciators
- DC/AC current ranges: 200µA-10A
- Diode and continuity test
- Frequency ranges: 2kHz-20MHz
- Z_{IN} = 10MΩ
- AC voltage ranges: 200mV-750V
- Data hold
- Resistance ranges: 200Ω-20MΩ
- Inductance: 20mH-20H • Auto power off
- Capacitance: 2nF-2000µF
- Size: 4.0"W x 1.5"D x 8.0"H

Includes: Manual, test probes and 9V battery

Part No.	Description	1	10
147096EC	2000-count multimeter	\$99.95	\$89.95



CE

7-Function Multimeter

2000-Count

- 7 function/22 ranges & 6 range volt tester
- Large 17mm (.67") display
- DC voltage ranges: 200mV – 1000V
- DC current ranges: 200µA – 10A
- Safety tester: 6, 12, 24, 50, 110 and 220 volts

- Unique voltage Safety Tester™
- Resolution: 0.1mV maximum
- AC voltage ranges: 200V – 750V
- Resistance ranges: 200Ω – 20MΩ
- Diode test and continuity beeper

Part No.	Model No.	1	10	25
192647EC	10XL	\$49.90	\$47.45	\$44.95



Our Lowest Priced 20,000-Count Multimeter

- Extra-large digits (0.8" digit height)
- Resolution: 10µV maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 2V – 700V
- DC/AC current ranges: 2mA – 10mA
- Resistance ranges: 200Ω – 200MΩ
- Capacitance ranges: 200pF – 20µF
- Measures transistor h_{FE} & continuity
- Hold button • Auto power off



Includes: Boot, 9V battery, probes and manual

Part No.	Product No.	1	10	25
136590EC	MY65	\$69.95	\$62.95	\$56.95

METEX® 2000-Count Multimeter

0.5" Digit Height • LCD Readout

- Resolution: 100µV maximum
- DC voltage ranges: 200mV – 100V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 20µA – 20A
- Resistance ranges: 200Ω – 20MΩ
- Auto zeroing
- Input impedance: 10MΩ
- Overload protection: 1000VDC/750VAC



Includes: Probes, carrying case, manual & 9V battery

Part No.	Product No.	1	10	50
27115EC	M3800	\$35.95	\$32.49	\$29.95

2000-Count Multimeters with RS-232, Analog Bar & Temperature

- 3½-digit LCD (.65" digit height) with analog bar
- Data hold
- True RMS (P/N155491 only)
- Resolution: 100µV maximum
- DC voltage ranges: 200mV – 1000V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 2mA – 20A
- Resistance ranges: 200Ω – 200MΩ
- Frequency ranges: 2kHz – 20MHz
- Diode, transistor h_{FE} logic test and continuity test
- 155475/155491 Temperature: -40°C to +1200°C @ 1°C resolution

Includes: Manual, probes, K-type thermocouple (except P/N 155483EC), 9V battery, software and DB9/MF cable

Part No.	Product No.	1	10	25
155483EC	ME-21	\$59.95	\$53.95	\$44.95
155475EC	ME-22 (temp)	79.95	69.95	62.95
155491EC	ME-22T (temp & RMS)	89.95	79.95	71.95



155483EC

METEX®

4000-Count Multimeter with RS-232, Dual Display & Inductance

- Dual displays for comparative measurements
- 3½-digit LCD (% digit height)
- True RMS
- Resolution: 100µV maximum
- DC voltage ranges: 400mV – 1000V
- AC voltage ranges: 400mV – 750V
- DC/AC current ranges: 400µA – 20A
- Resistance ranges: 400Ω – 40MΩ
- Temp.: -40°C to +1200°C; 1°C res.
- Measures inductance, capacitance, transistor h_{FE} and frequency
- Autorange all measurement settings

Includes: 9V battery, software and cable

Part No.	Product No.	1	10
137461EC	M3860D	\$149.95	\$134.99



METEX®

50,000-Count Digital Multimeter with Analog Bar Graph

- True RMS reading
- Auto and manual ranging
- 0.55" digit height
- AC/DC voltage protection
- Continuity and diode testing
- CE safety approved
- Basic DC accuracy:

BK5360 – 0.1%;
BK5380 – 0.025%

- DC voltage: 500mV to 1000V
(10uV to 100mV resolution)

- Resistance: 500Ω – 50MΩ (10mΩ – 1kΩ res.)
- Capacitance: 50nF – 50mF (10pF – 10μF res.)
- Frequency: 0.6Hz – 500kHz

Includes: Probes and manual

Part No.	Product No.	1	10	25
185201EC	BK5380	\$149.95	\$112.49	\$78.75

SALE



BK PRECISION

20,000-Count Benchtop Digital Multimeter

- 4 1/2-digit display, 5-digit green LCD
- DC accuracy: 0.05%
- Full overload protection
- Resolution: 100μV max.
- DC voltage ranges:

- 200mV – 1000V
- AC voltage ranges: 200mV – 750V

- DC/AC current ranges: 2mA – 10A
- Resistance ranges: 200Ω – 20MΩ

- Frequency measurement up to 200kHz
- Continuity check w/ beeper

- True RMS in AC range
- Data hold, diode check, transistor h_{FE} measurement

Part No.	Product No.	1	10	25
132564EC	DM441	\$219.95	\$209.95	\$199.95



True RMS

20,000-Count Benchtop Multimeter w/ RS-232, Analog Bar & 4 Displays

- Automatic polarity indicator
- 1-2 readings per second
- DC accuracy: 0.1% +5 digits
- 10 reading storage & compare
- Resolution: 10μV maximum
- DC voltage ranges:
- 200mV – 1000V
- AC voltage ranges: 200mV – 750V
- DC/AC current ranges: 2mA – 20A
- Resistance ranges: 200Ω – 20MΩ
- Frequency ranges: 20kHz – 20MHz
- MIN., MAX., AVE., relative functions
- Logic, diode, transistor h_{FE} and continuity test

Includes: Manual, power cable, probes and software

Part No.	Product No.	1	10
166852EC	MXD4660A	\$249.95	\$224.95



METEX®

Passive Component LCR Meter

- Measures L, C, and R with secondary parameter Q, D or R; both are displayed
- Accuracy of 0.7% for L & C, 0.5% for R
- Inductance ranges:

- 2000.0uH to 2000.0H
- Capacitance ranges:

- 2000.0pF to 2000.0uF
- Resistance ranges:

- 20.000Ω to 20.000MΩ
- Test frequencies of 120Hz and 1kHz

- Dissipation Factor (D) (with C) reading: 0 to 0.9999
- Quality (Q) reading: 0 to 9999

- Selectable parallel or series equivalent circuit
- Set HI/LO limits, absolute or percentage

- Bidirectional RS-232 port with optional software
- Max./Min./Avg. recording with auto power off

Includes: Leads, alligator clips, 9V battery & holster

Part No.	Description	1	10
198678EC	LCR Meter	\$178.95	\$160.95

EXTECH



2000-Count Digital LCR Meter

- Inductance ranges: 200μH to 200H
- Capacitance ranges: 200pF to 2000μF
- Resistance ranges: 2mΩ to 20MΩ
- Dissipation factor measurement
- Size: 6.7"L x 3.3"W x 1.4"D
- One-year warranty

Includes: Test leads and 9V battery

Part No.	Description	1	10	25
127538EC	LCR meter	\$139.95	\$125.95	\$118.95



Digital Light Meter

- Lux and footcandle
- Range: 0 - 50,000 Lux 0 - 5,000 Fc
- Analog output connections
- Separate light sensor for optimum location sampling
- Dimensions (sensor probe): 3.2"L x 2.2"W x 0.5"H

Part No.	Description	1	10
131764EC	Digital light meter	\$99.95	\$89.95



Mini DC/AC Current Clamp Meter/Multimeter

- Bright 1/2" LCD display with DATA HOLD
- 0.5" digit height
- Size: 7.1"L x 1.9"W x 1.4"H

Requires:
9V battery not included
(P/N 151095EC, pg 65)

Includes: Test leads, manual and case

Part No.	Description	1	10
115756EC	Mini DC/AC clamp meter ...	\$119.95	\$107.95



ACA*	20A, 200A	±1.2% + 5d
DCA	200A	±1.2% + 5d
ACV*	500V	±1.0% + 2d
DCV	200V	±0.8% + 1d
Resistance	200Ω	±1.2% + 1d
*Freq. Response	40-400Hz	
Zero Adjust	External knob for DCA	

Tools

6-Step Drill Tool

3/16" to 1/2"

Drill multiple holes in thin material with the same bit, faster and easier. You can drill holes in most materials such as plastic, metal, and wood up to 1/8" thick. No center punching on most sizes. Made of high-speed steel.

Part No.	Description	Size	1	10	25
172401EC	Step drill	3/16" to 1/2"	\$9.95	\$8.95	\$7.95



Mini-Drill and Stand

This Mini Drill is excellent for drilling through circuit boards and protoboards. The drill comes with an array of drilling, grinding and sanding attachments. Drill stand is designed to function like a drill press.

Part No.	Description	Wt. (lbs.)	1	10	25
26702EC	MS398 drill	0.8	\$29.95	\$26.95	\$23.95
26711EC	MS399 stand	1.8	19.95	17.95	15.95



Shown w/
drill
(26702EC)
& stand
(26711EC)

9-Piece Assorted Drill Bit Kit

- Variety of sizes: .014" to .125"
- Each kit will vary in contents of bit sizes
- Shank diameter: .125"

Includes: Plastic case

Part No.	Description	1	10	50
131676EC	9-piece drill bit kit	\$9.95	\$8.95	\$7.95



PC Board Drill Bits

- Reconditioned carbon steel bits
- High quality long lasting cutting edge
- Shank diameter: .125"
- Use for drilling holes in glass PC boards

Part No.	Drill Dia.	No.	Application	1	10	100
16619EC	.021"	75	Miscellaneous ..	\$1.69	\$1.49	\$1.35
16580EC	.040"	59	Plated thru holes	1.95	1.75	1.59



30-Day Money Back Guarantee

If you're not satisfied, we'll take it back!

Details on page 70.

D-Sub Pin Insertion/Extraction Tool

- Insertion/extraction tool: red/white plastic body; exchangeable tips

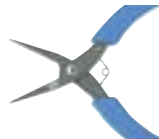
Part No.	Description	1	10	100
19094EC	Tool	\$3.49	\$2.99	\$2.59



5.3" Half-Round Long Nose Pliers

- Stainless steel
- Spring return
- Durable rubber handles
- 5.3" length with 1.4" plier nose
- Knurl jaws

Part No.	Description	1	10	50	100
35490EC	Half round	\$4.95	\$4.49	\$3.95	\$3.49



Xcelite®

Pliers

- Spring return
- Micro series wire cutter – flush; 6"

Part No.	Product No.	1	10	50	100
146712EC	170M	\$5.95	\$5.35	\$4.79	\$4.29



5" Wire Cutter/Stripper

- Insulated handles
- Spring return
- Tempered steel cutting edge
- Adjustment for wire gauges
- Size: 5.0"L x 3.0"W
- For 10-30 AWG wire • One-year warranty



Part No.	Mfr. Cross Ref. No.	1	10	50	100
78991EC	HT108	\$3.95	\$3.49	\$2.95	\$2.59

Automatic Wire Strippers

- Strips 8-22 AWG wires
- Spring load grip
- Size: 7.0"L x 2.5"W
- Weight: 0.8 lbs.



Includes: Wire stopper for desired strip length

Part No.	Description	1	10	25
175097EC	Auto wire stripper	\$15.95	\$14.39	\$12.95

6" Premium T6 Wire Stripper

- Contoured cushion-grip handles
- Wire size markings, in AWG and mm
- 16-26 AWG stranded
- Size: 6.0"L x 2.0"W



Part No.	Product No.	Description	1	10
161234EC	ID45-216	T-6 16-26 AWG	\$15.95	\$14.49

Nibbling Tool

- Perfect for cutting, trimming, or notching sheet metal up to 18 AWG
- Time-saver when working on prototyping, chassis, and circuit boards
- Minimum .375" hole required • Size: 7.8"L



Part No.	Prod. No.	Description	1	10	25
18809EC	HT204	Nibbling tool	\$8.95	\$7.95	\$6.95
29330EC	HT204B	Replacement bit	4.95	4.49	3.95

Impact Punch-Down Tool

- Reversible clip-in blade
- Adjustable (HI-LO) spring-loaded impact mechanism
- Storage bin on handle for spare blade



175071EC:

Punch-down tool with blade

- For 66-type terminals • Size: 5.2"L x 1.5"W x 1.0"H

175089EC: **Punch-down blade**

- Blade for 110-type terminals

Part No.	Description	1	10
175071EC	Tool w/ 66 blade	\$39.95	\$35.95
175089EC	Punch-down blade 110	14.95	13.49

IDC Connector Crimping Tool

- Crimping distance: 27.5mm to 6mm (with attachment)
- Cushioned red handles
- Crimp insulation displacement connectors
- Use for IDC socket connectors, pg 34
- Size: 9.2"L x 3.0"W



Part No.	Product No.	1	10	25
73251EC	HT214	\$14.95	\$13.49	\$12.15

Non-Insulated Terminal D-Sub Crimping Tool

14-26 AWG

- Metal crimping tool with cutter and insulated handles
- For computer pins, sockets and D-sub 26-28 AWG wire
- For butt-insulated connectors, 22-26 AWG wire • Coiled spring return
- For telephone spade lugs, 22-26 AWG wire
- For non-insulated connectors, 20-22 AWG wire
- For non-insulated connectors, 14-18 AWG wire



Part No.	Product No.	1	10	25	100
99442EC	HT202A	\$8.95	\$7.95	\$6.95	\$6.29

D-Sub Crimping Tool

20-28 AWG

- Crimps D-sub pins and sockets
- Size: 7.0"L x 4.0"W



Part No.	Product No.	1	10	25
159265EC	HT213	\$9.95	\$8.95	\$7.95

Ratcheted BNC Crimping Tool

- Crimps RG58, RG59, RG62, RG174 and fiber optic
- All steel construction



Part No.	Product No.	1	10	25
114534EC	HT-3019	\$22.95	\$19.95	\$17.95

Terminal Wire Crimping Tool

- Crimps solderless terminals: 18-22 AWG red, 14-16 AWG blue and 10-12 AWG yellow
- Size: 9.0"L x 2.0"W



Part No.	Mfr. Cross Ref. No.	1	10	25
72995EC	HT303	\$17.95	\$15.95	\$13.95

Magnetic Tip Measuring Tape

- Measuring with a regular tape measure is not easy, especially if you are working single-handed with metal materials. With this measuring tape, you can easily clamp on to metal surfaces with its magnetic hook and make precise measurements.
- Magnetic end hook for convenient measuring and TRU ZERO function
- Blade with nylon coating for easy scale reading
- Anti slip and shockproof rubber case
- Heavy duty spring & blade system • Extends 25'



Part No.	Description	1	10
215415EC	Magnetic tip tape measure	\$13.85	\$12.59

3X Magnifying Lamps

- 45" extension arm
- .49" Diameter lens
- Supplied with 22-watt Circuline tube
- Extra strong, all-metal mounting base w/ electrical outlet
- New wire clip design permits easy installation
- Power requirement: 110VAC/60Hz



Part No.	Description	1	10	25
100829EC	Black lamp	\$59.95	\$53.95	\$49.95
149981EC	White lamp	59.95	53.95	49.95

Standard Adjustable 3X Magnifying Lamp

- 4" Diameter lens
- Maneuverable 30" arm extension
- Lamp tilts or turns in any direction
- Uses 60W incandescent bulb (not included)
- Power requirement: 110VAC/60Hz



Part No.	Description	1	10	25
22710EC	Magnifying lamp	\$29.95	\$26.95	\$23.95

Precision 5X Magnifying Lamp

- With an arm that extends to 40" long, adjustable to any direction or angle, and 5X magnifying glass with built-in light, this is the perfect tool to help identify small electronic components and for soldering electronic components.
- 5" diameter lens • Weight: 7.1 lbs.
- Power requirement: 110VAC/60Hz



Includes: 22W circuline fluorescent bulb

Part No.	Description	1	10	25
197456EC	Magnifying lamp	\$109.95	\$98.95	\$88.95

55-Piece Tech Tool Kit

- Perfect for general & precision work



Kit includes:

- Screwdriver handle, 6-pc. mini-hammer set, 5-pc. of double edge blade, 3-pc. soldering aid kit, 3-prong holder, 7-way crimping tool, 6 precision screwdrivers, 7-pc. hex key wrench, 30W soldering iron, adjustable wrench, anti-static strap, 8" linemans pliers, bent needle nose pliers, brush, desoldering pump, diagonal cutting pliers, flat nose pliers, utility knife, IC extractor, mini flashlight, 5 needle files, needle nose pliers, rosin core solder, 2-pc. screwdriver set and 2 tweezers
- Carrying case has outer velcro pockets to store paperwork, etc.
- Size: 17.6"L x 12.8"W x 4.0"H • Weight: 9.2 lbs.

Part No.	Description	1	5
136311EC	55-piece tool kit	\$129.95	\$116.95

66-Piece Tech Tool Kit

Kit for Field Technicians and Engineers!

Kit includes:

- Mini vacuum cleaner; cassette head cleaning fluid; keyboard/monitor spray cleaner; long nose pliers w/ cutter; hobby vice; 3-pc. soldering aid kit, 3-prong holder, 5-way crimping tool, 6 long precision screwdrivers, 10-pc. (SAE) mini wrench set; 30W soldering iron; adjustable wrench, anti-static strap, 8" linemans pliers, brush, desoldering pump, diagonal cutting pliers, digital multimeter, electrical test screwdriver, electricians tape, heat sink, flat nose pliers, utility knife, IC extractor, mini drill, mini flashlight, 5 needle files, needle nose pliers, rosin core solder, 13-pc. screwdriver set, soldering stand, stainless steel scissors, tweezer, utility components box and carrying case
- Size: 18.0"L x 14.0"W x 6.0"H • Weight: 15.5 lbs.



Part No.	Description	1	5
105646EC	66-piece tool kit	\$179.95	\$164.95

RG Type Bulk Coaxial Cable

RG58/U & RG58A/U (50Ω):

Nominal capacitance: 27pF/ft.; center resist.: 10.4Ω/1kft. @ 77°F

RG59/U (75Ω): Nominal capacitance: 19pF/ft.; center resist.: 16.5Ω/1kft. @ 77°F

RG174/U (50Ω): Nominal capacitance: 30.8pF/ft.; center resist.: 97Ω/1kft. @ 77°F

• Prepackaged and priced in increments of 100' or 1000'

Part Number	Mfr. Cross Ref. No.	Description	100 ft.	1000 ft.
116898EC	RG58A/U	For ethernet, oscilloscopes (stranded 20AWG)	\$16.00	\$140.00
112037EC	RG174/U	For ethernet, oscilloscopes (stranded 26AWG)	19.00	169.00

BNC/RCA Adapters

• Convert existing cabling systems to more readily available parts for expansion, replacement or upgrade



Part No.	Description	1	10	100	500
114788EC	RCA female to BNC male adapter	\$1.35	\$1.05	\$.99	\$.98
114753EC	RCA male to BNC female adapter	1.59	1.45	1.29	1.19
114770EC	BNC female to "F" connector male adapter	1.79	1.59	1.39	1.19

RCA Jacks

• Standard RCA jacks for audio and video signals
• See page 42 for RCA cables



Part No.	W x D x H (ins.)	1	10	100	1000
112475EC	.42 x .57 x .48	\$.39	\$.35	\$.31	\$.19
159484EC	.84 x .38 Black	.49	.44	.39	.24
172339EC	.84 x .38 Red	.49	.39	.31	.23

0.2"-Pitch Power Connectors and Pins

Connector & Housing Specifications:

• Voltage rating: 250VAC (Mate-N-Lock 600VAC)
• Operating temperature: -55°C to +105°C

Crimp Pin Specifications:

• Material: tin plated brass • Current rating: 1.5 amps
• Wire size range: 18-24 AWG
• Use crimp tool P/N 99442EC, pg 50

For 5.25" Disk Drives and Power Supplies

42075EC & 42067EC Connector Housings:

• Keyed mating connectors
• External key bar indicates pin 1



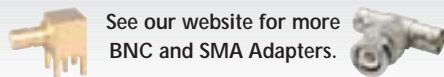
• See website for extraction tools, P/N 131887EC & 131879EC

• Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	10	100	1000
109145EC	4-pin M vert. PCB mtg	\$.59	\$.49	\$.31
117567EC	4-pin M PCB mounting, horizontal edge mount	.63	.55	.49
42075EC	4-pin M housing	.12	.11	.10
42067EC	4-pin F housing	.23	.18	.15
42729EC	M crimp pin for 42075EC	.10	.07	.06
42649EC	F crimp pin for 42067EC	.10	.07	.06

25 More @ www.Jameco.com

See our website for more BNC and SMA Adapters.



SMA Connectors



• Application: cellular phone, data communication, instrumentation and video
• 50Ω impedance • Plating gold except • 153285EC: plating nickel
• Frequency range: 0-18GHz • Temperature range: -65°C to 165°C
153365EC: Cable type: RG-174 153285EC: Cable type: RG-58/174

Part No.	Description	1	10	50	100
153365EC	SMA 50Ω crimp type male plug connector	\$3.99	\$3.59	\$3.15	\$2.85
145381EC	SMA straight female PCB mount connector, 4 legs	5.25	4.75	4.25	3.49
153285EC	SMA bulkhead solder female w/ washer, rear mount	3.29	2.99	2.69	2.45
160012EC	Panel mount feed thru connector female - female	4.49	4.05	3.65	3.29
188509EC	SMA PCB straight jack	3.69	3.35	2.99	2.69
188525EC	SMA PCB right angle jack	5.95	4.95	3.79	3.19

BNC Coax Connectors

BNC connectors are miniature, lightweight units designed to operate up to 11GHz and typically yield low reflection up to 4GHz



Part No.	Fig.	Description	1	10	100	500
71482EC	1	BNC male with pin and ferrule (RG-58)	\$1.49	\$1.35	\$1.25	\$1.09
112109EC	1	BNC male with pin and ferrule (RG-174)	1.59	1.45	1.29	1.15
71589EC	2	BNC female panel mount (UG-1094A)	1.49	1.35	1.25	1.09
111561EC	3	BNC female isolated bulkhead	2.29	1.99	1.79	1.59

0.098"-Pitch AT Power Connectors for Motherboards & Power Supplies

• Voltage rating: 250V AC/DC • Current rating: 7A AC/DC • Temperature range: -25°C to 85°C
• Insulation resistance: 1000MΩ minimum • Withstanding voltage: 1500V/min.

78300EC: AMP60G male 6-pin PCB mount connector

• Material of post: tin-plated brass • Diameter of post: .09"

78326EC: AMP50G female 6-pin housing connector • Material: nylon

78318EC: AMP501T terminal pin

• Material: tin-plated brass

* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	L	W	H	Dia	Use With	1	10	100	1000
78300EC	6-pin male connector	.93"	.37"	.57"	—	—	\$.45	\$.39	\$.35	\$.31
78326EC	6-pin housing connector	.94"	.25"	.74"	—	78300EC	.35	.31	.28	.25
78318EC	Power terminal pin, female	.69"	—	—	.09"	78326EC	*	.11	.08	.07



BNC Coax Male Connectors

BNC connectors are miniature, lightweight units designed to operate up to 11GHz and typically yield low reflection up to 4GHz.



SALE

BNC with Pin and Ferrule

Part No.	Description	1	10	100	500
135618EC	RG6	\$.89	\$.69	\$.45	\$.39
71482EC	RG58	1.49	1.35	1.25	1.09
71271EC	RG59/62	1.39	1.15	.85	.59
112109EC	RG174	1.59	1.45	1.29	1.15

SMA/SMB 50Ω Coax Cables

• SMA male to SMA male



Part No.	Cable	Length (ft.)	1	10	50
163854EC	RG174	1	\$4.49	\$3.95	\$3.39
153381EC	RG174	2	4.95	4.29	3.39
153390EC	RG174	4	5.49	4.75	4.29
159450EC	RG174	6	6.79	6.15	5.55

BNC Coax Cables



RG58/U 50Ω Cables

• For Ethernet networks, oscilloscopes

Part Number	Mfr. Cross Ref. No.	Lgth (ft.)	1	10	50	100
11404EC	CRG58-3	3	\$3.95	\$3.59	\$3.25	\$2.89
102331EC	CRG58-6	6	3.69	3.29	2.99	2.69
180822EC	CRG58-10	10	4.49	3.59	2.69	1.89
169818EC	CRG58-15	15	5.49	4.39	3.29	2.35
102365EC	CRG58-50	50	9.49	8.55	7.69	6.89

RG174/U 50Ω Cables

• For Ethernet networks, oscilloscopes

Part Number	Mfr. Cross Ref. No.	Lgth (ft.)	1	10	50	100
111472EC	RG174U3	3	\$3.85	\$3.49	\$3.15	\$2.85
111481EC	RG174U6	6	4.59	4.15	3.75	3.35

BNC PCB Connectors

- **146528EC:** Ideal for applications where multiple insertions require a connector which can endure the stress of high torque
- **146510EC/161656EC:** Maintains matching impedance at 50Ω & 75Ω. Ideal for LAN cards & precision video

Part No.	Description	Length (L)	1	10	100	500
146528EC	BNC straight metal	.719"	\$2.79	\$2.55	\$2.29	\$2.05
146510EC	BNC right-angle plastic insulation	1.37"	1.95	1.75	1.49	1.25
161656EC	BNC right-angle metal	.861"	2.29	1.99	1.79	1.59



SALE

Single-Line Telephone Filter

In-line Z-BLOCKER® filter blocks interference between DSL /HPN, voice and RF from cordless phones. Plugs directly into any standard phone jack and works with any single line phone, fax or dial-up modem.



Part No.	Description	1	10	25
196429EC	Telephone filter	\$7.95	\$7.16	\$6.44

Modular Data Network Cables

- 24 AWG (7 x 43) stranded
- UTP • 8P8C
- "Snagless" boot
- High-flexibility
- Color coded for easy wire tracing
- 4 pair

Blow-out Prices!

124741EC 124847EC

Category 5 (100MHz) SALE

Part No.	Description	Color	1	10	100
201662EC	3ft. cable RJ45	Gray	\$1.15	\$1.05	\$.95
124741EC	15ft. cable RJ45	Red	2.39	2.15	1.95
124847EC	3ft. cable RJ45	Black	1.15	1.05	.95
124804EC	3ft. cable RJ45	Blue	1.15	1.05	.95
170190EC	25ft. cable RJ45	Blue	3.55	2.69	1.89
124695EC	7ft. cable RJ45	Yellow	1.49	1.35	1.25

Category 5e (350MHz)

Part No.	Description	Color	1	10	100
168292EC	3ft. cable RJ45	Gray	\$3.99	3.59	\$3.25
168305EC	7ft. cable RJ45	Gray	4.95	4.49	3.95
169261EC	10ft. cable RJ45	Gray	6.95	6.25	5.59
168313EC	15ft. cable RJ45	Gray	6.95	6.39	5.69
201734EC	3ft. cable RJ45	Blue	3.95	3.55	3.19
201742EC	7ft. cable RJ45	Blue	4.95	4.49	3.95

Bulk Modular Network Cables

- 100MHz
- Color: gray
- UTP • 8C
- 4 twisted pairs
- Insulation: polyethylene
- Nom. OD.: .189"
- Nominal impedance: 100Ω

Solid: uses modular plug P/N 119343EC, far right
Stranded: uses modular plug P/N 79281EC, far right

- Prepackaged and priced in increments of 25' or 100'

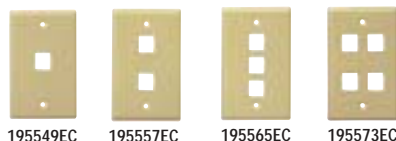
24 AWG UTP Category 5 – 100MHz

Part No.	Description	25 ft.	100 ft.	1000 ft.
118130EC	Stranded 7/32 AWG	\$5.95	\$19.35	\$164.50

24 AWG UTP Category 5e – 350MHz

Part No.	Description	25 ft.	100 ft.	1000 ft.
176225EC	Solid.....	\$5.00	\$17.00	\$100.00
176233EC	Stranded	6.00	21.00	180.00

RJ45 Keystone Wall Plates



- Color: ivory • Size: 2.8"W x 4.5"H

Part No.	No. of ports	1	10	100
195549EC	1	\$1.25	\$1.15	\$.99
195557EC	2	1.25	1.15	.99
195565EC	3	1.25	1.15	.99
195573EC	4	1.25	1.15	.99

RJ45 Modular Jacks

Punchdown Keystone Type

- Removable jacks used in wall plates (clip in)
- CAT 5e classification
- Punchdown type wiring connections with color coding



195602EC

195611EC

• 8P8C

Part No.	Color	1	10	100
195590EC	Red	\$3.59	\$3.39	\$3.19
195602EC	Yellow	3.59	3.39	3.19
195611EC	Green	3.59	3.39	3.19
195629EC	Black	3.59	3.39	3.19
195637EC	Ivory	3.59	3.39	3.19

Cat 5e Crossover Cable

- Connect 2 PCs without a hub
- 24AWG (7 x 43) stranded
- Strain relief RJ45 connectors
- 4-pair • 8P8C • UTP



Part No.	Description	1	10	100
169261EC	10' cable RJ45, gray ..	\$6.95	\$6.25	\$5.59

Modular Jack Boxes & Wall Plate

W/E = Western Electric type no.

Fig. 1 (72311EC)
W: 2.8"
H: 4.5"Fig. 2 (71651EC)
W: 2.0"
H: 2.2"
D: 0.9"

Part No.	Description	W/E	Fig.	1	10	100
72311EC	6P6C & 8P8C double wall jack plate w/ jacks	—	1	\$1.95	\$1.75	\$1.57
103464EC	6P4C adhesive jack RJ11	625A-4	2	1.39	1.19	1.09
71984EC	6P6C adhesive jack RJ11	625BS-6	2	1.39	1.19	.99
71651EC	8P8C adhesive jack RJ45	635	2	1.95	1.65	1.45

Network Starter Kit

- Single chip controller on PCI network card complies to bus specification 2.1
- Conforms with IEEE standards
- Shielded RJ45 connector on network card
- On-board socket for an optional remote boot ROM
- LED diagnostic to monitor network conditions
- 5-port hub supports 10/100Mbps
- Auto negotiation capability • Up-link port for expansion

Includes: Two each PCI network cards and 15' straight-through cables, 5-port mini hub, 7.5VDC @ 1A wall transformer, 3.5" diskette drivers, and manual

Part No.	Description	1	10
208469EC	Network starter kit	\$64.95	\$58.49

Network Expansion Accessories

Part No.	Description	1	10
168321EC	15' cable RJ45	\$9.99	\$8.99
173606EC	PCI ethernet card	14.95	13.49

Modular Plugs

SALE



79290EC

79273EC

79281EC

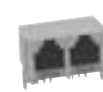
119343EC

P = No. of positions C = No. of contacts
 W/E = Western Electric type number

* Prepackaged: order in increments of 10, 100 or 1000

Part No.	Description	W/E	1	10	100	1000
79290EC	6P4C (RJ11)	623	*	\$1.11	\$1.10	\$1.11
79273EC	6P6C (RJ11)	623	*	.20	.19	.18
79281EC	8P8C (RJ45) (for stranded wire)	641	*	.28	.24	.20
119343EC	8P8C (RJ45) unshielded (for solid wire)	—	.49	.44	.35	.28

Modular Jacks



105945EC

204169EC

124038EC

115844EC

- PC mount
- Voltage rating: 150 volts AC max.
- Contact current rating: 1.5 amp max. @ 25°C
- Durability: 750 mating cycles

Part No.	Description	W/E	1	10	100
105945EC	6P4C (RJ11) top flange	623	\$6.62	\$5.52	\$4.45
204169EC	6P4C (RJ11) dual	—	1.09	.99	.89
124038EC	6P6C (RJ11) 6' leads	—	1.25	1.15	.99
115844EC	8P8C (RJ45)	641	.48	.44	.40

RS-232-to-RJ11/RJ45 Modular Jack Adapters



66181EC

66237EC

Change your RS-232 port to a RJ11 or RJ45 modular jack. This will allow you to use modular phone cable rather than RS-232 cable, thus simplifying networking applications. Comes complete with wiring and hardware.

Part Number	Cross Ref. No.	Description	1	10	100
66181EC	G9P6	DB9 M-RJ11(6P6C)	\$2.59	\$2.35	\$2.09
66190EC	G9P8	DB9 M-RJ45(8P8C)	2.49	2.25	2.05
114737EC	G9S4	DB9 F-RJ11(6P4C)	1.95	1.79	1.59
66211EC	G9S8	DB9 F-RJ45(8P8C)	2.99	2.69	2.45
66229EC	G25P6	DB25 M-RJ11(6P6C)	2.95	2.35	1.99
66237EC	G25P8	DB25 M-RJ45(8P8C)	2.99	2.69	2.45
204273EC	TMA-105	DB25 F-RJ11(6P4C)	1.95	1.49	1.05
66245EC	G25S6	DB25 F-RJ11(6P6C)	2.59	1.95	1.39
66253EC	G25S8	DB25 F-RJ45(8P8C)	2.89	2.59	2.29

Modular Cable Tester with Remote Terminator

Easily read correct pin configuration of 10baseT, 10base2, RJ45/RJ11 modular cables, 258A, TIA568A/568B, token ring, etc. Test installed cables either on wall plate or patch panel from a distance.

- Check for cable continuity, miswiring, open, short, grounding and pin configurations
- Cable adapters: RJ45 M-M, 2 RJ45M-BNCM and BNC F-F
- On-board connectors: 2 RJ45F (tester) and 1 RJ45F (remote)
- Size: 4.0"L x 2.5"W x 1.0"H (Main console)
- Size: 4.0"L x 1.3"W x 1.0"H (Remote) • Wt.: 0.7 lbs

Includes: Manual and test cables

Part No.	Description	1	10
145710EC	Modular cable tester	\$84.95	\$76.49

RS-232 Line Status Tester

Identifies simple interface problems which you can repair yourself. Targets the status of lines 2, 3, 4, 5, 6, 8, 11, 19 and 20. Connectors: male to female DB25.

SALE



Part No.	Description	1	10	100
14285EC	Check line tester	\$7.95	\$6.49	\$5.95

Flexible Multilink RS-232 Tester & Breakout Box

Visually indicates the status of lines 2, 3, 4, 5, 6, 8, 20 and 22 on the DTE and DCE sides. Provides signal status at a glance.

Complete cable "breakout" & reconfiguration. Connectors: DB25 male & DB25 female.

- Cable length: 4" • Size: 3.5"L x 3.3"W x 1.0"H

Includes: handy carrying case, 10 jumper wires and a device wiring chart

Part No.	Description	1	10	25
25945EC	Tester/breakout box ...	\$22.95	\$19.95	\$17.95

ISA Fast SCSI-II Controller

- Compatible with DOS, Windows®, Windows® NT, Windows® 95, OS2 Network, and SCO Unix
- Internal and external SCSI-II connectors
- Size: 6.3"L x 2.9"W

Includes: Setting sheet, ribbon cable, and software (3.5" disk)

Part No.	Description	1	10
149294EC	ISA SCSI-II controller	\$44.95	\$39.95

Internal & External Modems on our website.

Discover what you are looking for @ www.Jameco.com

Black Magic Telephone Ringing Generator

Switching inverter that produces low-frequency alternating current to signal telecom ringers or equivalents.

- Frequency: 20Hz
- Series resistor: 300Ω
- Nominal output voltage: 86 Vrms
- No reverse polarity protection

Part No.	Product No.	1	10	25
145816EC	LBMR12	\$26.95	\$24.49	\$21.95

NETGEAR PCMCIA Network Card

Plug into the power of networking – share printers, share access to the internet, send and receive email and messages, drag and drop files between computers.

- Auto detection of 10/100 Mbps speed (10Base-T / 100Base-Tx)
- Full duplex capability
- Plug and play, easy installation • PCMCIA type II
- LED indicator for 100Mbps activity and link activity

Requirements: 486/Pentium® compatible laptop, PCMCIA slot (type II), Windows® operating system

Includes: 3.5" driver software, PCMCIA to RJ45 adapter and RJ45 network cable

Part No.	Description	1	10
210972EC	PCMCIA network card	\$29.95	\$27.95

QUIKLINK Automatic Telephone Ring Down Unit

- Applications: elevator and door entry phones; in-office and off-premise emergency hotlines; tie lines between phones, PABX and Key systems; CO line simulators for sales demonstrations; testing rings, answering, and signal path functions in telecom repairs, installation and production
- Ringing power: 70V @ 20Hz modified square wave
- Power input: 12VAC @ 700mA (max.)
- Line feed type: two wire unbalanced
- Max. loop resistance: 600Ω • Term.: 4-40 screws
- LED hook status indicator; ringing cadence: continuous/1 second on 1 sec. off/2 sec. on 2 sec. off/2 sec. on 4 sec. off; additional power input: 20-28VDC @ 300mA max.; RJ11 terminations

Part No.	Dimensions	1	10
179936EC	4.2"L x 2.5"W x 0.5"H	\$99.95	\$89.95

AT&T Fax Switcher

- Features automatic ring reduction, answering system transfer and transfer timer, extension in use detection and calling tone detection, dial pulse / rotary transfer, unanswered call transfer, reverse modem detection, remote call alert, line interrupt protection, calling tone detection
- System capacity: line-in, answering machine, phone, modem/fax connection

Includes: 12VAC @ 830mA power supply, 6' 11" telephone cable, and manual

Part No.	Product No.	Description	1	10
152004EC	ATT200A	Fax switch	\$24.95	\$17.95

PHOEBE Personal Fast Ethernet Switch Hubs

JAMECO's choice as the best performance/value combination in networking – PHOEBE.

- IEEE 802.3 (10Base-T) / 802.3U (100Base-TX) compliant
- Auto MDI/MDIX, auto negotiation RJ45 ports
- Store and forward method
- Packet forwarding rate: 10Base-T – 14880pps to 10Mbps; 100Base-TX – 148800pps to 100Mbps
- 8k media access control (MAC) addresses
- Buffer memory size: 256k bytes RAM
- LED indicator for power and link activity

Includes: 7.5VDC @ 1A power supply, installation guide and mounting hardware

Part No.	Description	Size (LxWxH)	1	10
215634EC	5-port	4.9" x 2.9" x 1.2" ...	\$38.95	\$33.95
215642EC	8-port	6.7" x 3.9" x 1.2"	\$49.95	\$44.95

External 56kbps Fax/Modem

- Digital telephone answering machine with voice mail system
- RS-232 (DB9 female) interface
- Modem line speed: 300 – 56000bps
- Standard Compatibility: ITU-T V.92, V.90, V.34, V.32, V.32bis, V.23, V.22bis, V.21, and Bell 103, 212A
- Error Correction: ITU-T V.42, MNP2-4
- Data Compression: ITU-T V.42bis, MNP5
- Flow Control: RTS/CTS, XON/XOFF
- Comment Set: TIA/EIA 602 "AT" command set
- Fax /Modem Line Speed: 2400 ~ 14400bps
- Standard Compatibility: ITU-T V.17, V.27 ter, V.29
- Command Set: Class 1, 1.0, 2 and associated AT command sets
- Size: 6.3"L x 4.0"W x 1.3"H • Weight: 1.8 lbs.

System requirements: Pentium or PC compatible with 16MB of memory, available RS-232 slot; Windows® 9x/ME/NT4.0/2000/XP

Includes: RS-232 cable (DB25/DB9 female to DB9 male); phone cord, 9VAC@1A power supply, CDROM drivers and manual

Part No.	Description	1	10
216493EC	Conexant V.92 serial modem	\$49.95	\$44.95

PCI Ultra ATA/133 Controller Card

- Supports 4 IDE devices
- 133Mbytes/sec burst data rate on PCI local bus and IDE bus
- Widest range of compatible IDE/ATAPI devices
- Supports Windows® 98/ME/NT4.0/2000/XP
- Enhanced BIOS on board • Size: 5.2"L x 2.5"W

Includes: 80-wire/40-pin cable, 3.5" drivers & manual

Part No.	Description	1	10
208021EC	Ultra 133 controller card	\$49.95	\$47.45

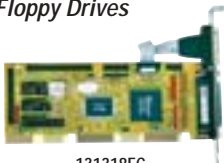
Short Haul Modem

- Up to 38,400 baud
- Will communicate over 6.3 miles of cable
- No external power required • DCE/DTE selectable
- Xon-Xoff or hardware handshaking
- RS-232 interface (DB25 female)

Part No.	Description	1	10	25
2116581EC	Short haul modem ...	\$29.95	\$26.95	\$23.95

ISA IDE Super 16-Bit I/O Plus**Supports 2 IDE and 2 Floppy Drives**

- Parallel printer port interface(P/N 131318EC is bidirectional)
- Game port
- Two RS-232 serial ports
- UART emulation: 67061EC: 16450; 131318EC: 16550



131318EC

SALE**Includes:** Manual and cables

Part No.	Description	1	10
67061EC	16450 UART I/O	\$14.95	\$11.25
131318EC	16550 UART I/O	29.95	26.95

PCI Ultra High-Speed I/O**Serial 16C550 and Parallel Port**

- 32-bit PCI bus with PCI bus 2.1 specification compliant
- Serial ports are software configurable w/ throughputs up to 921.6kbps
- BPP/SPP mode compliant
- Windows® 95/98/NT 4.0 drivers supported



169594EC

SALE

169594EC: 2 serial DB9M on card and 1 parallel DB25F panel bracket assembly

Part No.	Description	1	10
146667EC	Dual serial (16C550)	\$38.95	\$36.95
169594EC	2 serial (16C550) and 1 parallel	59.95	53.95

PCMCIA RS-232 Interface

PC card/PCMCIA-based serial port card.

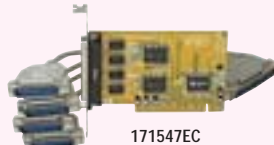
- Low cost single port RS-232 interface
- Uses 16550 UART
- 5, 6, 7 or 8 data bits
- Odd, even or no parity
- 115k baud data rates
- Configured as COM1, COM2, COM3 or COM4
- PCMCIA type II compliant

**Includes:** 1' cable

Part No.	Description	1	10
164451EC	PCM-COM232 card	\$119.95	\$104.95

PCI High-Speed Multi-Port Serial I/O**2, 4 or 8 16C650 Serial Ports**

- 32-byte FIFO
- Plug & Play compatible
- Standard RS-232 interface
- Transfer rate: up to 921kb/sec.
- Supports IRQ sharing



171547EC

172005EC: Dual 16C650 Serial Ports

- Two DB9 male connectors

Includes: Manual and drivers on CD-ROM & floppy

171547EC: Quad 16C650 Serial Ports

Includes: Manual, cable (37-pin male to 4 DB25 male) and drivers on CD-ROM

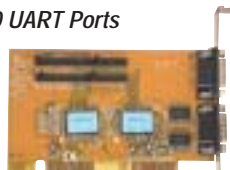
171660EC: Eight 16C650 Serial Ports

Includes: Manual, internal cable with bracket, 2 cables (37-pin male to 4 DB25 male) and drivers on CD-ROM**System requirements:** 486 and higher compatible, Windows® 95/98/NT/2000

Part No.	Description	1	10
172005EC	2-port PCI serial	\$59.95	\$53.95
171547EC	4-port PCI serial	129.95	116.95
171660EC	8-port PCI serial	179.95	161.95

ISA 1 & 2-Port High-Speed Serial I/O**Single & Dual 16C650 UART Ports**

- 16-byte FIFO
- Transfer rates up to 921kb/sec.
- IRQ (3, 5, 7, 9, 10, 11, 12, 15) and address jumper configurable
- Weight: 0.5 lbs.



171555EC

171504EC: Single High-Speed Serial Port

- RS-232 V24 standard serial interface
- 1 DB9 male connector • Size: 5.0"L x 2.0"W

171555EC: 2 High-Speed Serial Port

- 2 DB9 male connectors • Size: 5.0"L x 2.7"W

System requirements: 486/586 and higher compatibles; Windows® 95/98/NT/2000**Includes:** Manual and drivers on CD-ROM

Part No.	Description	1	10
171504EC	Single serial	\$13.69	\$12.45
171555EC	Dual serial	24.95	17.49

Serial Port Complete

Lakeview Research RS-232 & RS-485 are the most versatile, inexpensive interfaces for linking, but the hardware & programming are often misunderstood. This book provides you with everything you need to design, program, install and troubleshoot the links you set up. (306 pages, 1998)

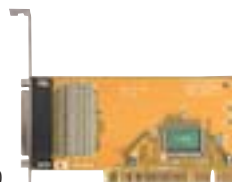
Includes: 3.5" diskette

Part No.	Description	1	10
154771EC	Serial Port Complete Book	\$39.95	\$35.95

PCI Ultra High-Speed Parallel**Single Ultra High-Speed Port**

- Supports ECP and EPP
- Transfers data up to 2MB/sec.
- Plug & Play ready
- 32-bit PCI interface

- 32-byte FIFO
- Supports IRQ sharing
- 1 DB25 female connector

**System requirements:** 486/586 and higher compatibles; Windows® 95/98/NT/2000**Includes:** Manual and drivers on CD-ROM

Part No.	Description	Size (L"xW")	Weight (lbs.)	1	10
171926EC	PCI single parallel	4.7 x 2.2	0.5	\$39.95	\$35.95

Industrial Communications**RS-232 to RS-485/422 Bidirectional Converters**

- Cable length: 4000' max.
- Data rate: 1MB/second
- 4-wire full duplex or 2-wire half duplex
- Controlled by RTS signal
- Point-to-point and multidrop operations
- RS-485: terminal block & RJ11 connections
- RS-232: DB25 female connector • Input: 110VAC



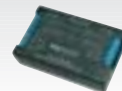
117701EC

Part No.	Description	1	10
117701EC	RS-232-485/422	\$57.95	\$51.95
197931EC	RS-232-485/422	69.95	62.99
122956EC	RS-232-485/422 OPT ISO	119.99	107.99

GPIO IEEE-488.2 Board**PCI Bus**

- 1 MB/s transfer rates • 1024 word FIFO buffer

Part No.	Mfr. Cross Ref. No.	1	10
177121EC	PCI-GPIB-1M	\$398.95	\$358.95

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See our website for more Industrial Communication Products.

2-Port USB-A PCI Card

- Plug & Play compatible
- Uses VIA VT83C572 controller chip
- USB specification V.1.1 compatible
- USB legacy BIOS supports
- Operates in USB-aware operating system (Win® 95, 98)

Includes: Manual

Part No.	Description	1	10	25
155299EC	PCI USB	\$24.99	\$22.49	\$20.25

2-Port USB-A PCMCIA Card

- PCMCIA type-II card
- New 32-bit CardBus
- Size: 4.6"L x 2.1"W
- USB 1.1 OHCI USB standard; 12Mbps max. speed

System requirements: Windows® 98, ME, 2000 and Mac OS 8.6 or later

Includes: Manual

Part No.	Description	1	10
189499EC	USB 1.0 CARD BUS card	\$69.95	\$62.95

USB-A Female Cables & Bracket

- Supports data transfer rates of 12Mbps
- Connection of two devices
- Dual USB-A female connectors • 8" long

Part No.	Description	1	10	25
144813EC	USB-A panel mount	\$6.95	\$6.25	\$5.59

USB to Serial Adapter with Prolific Chipset

This USB serial adapter provides an external Plug-and-Play RS-232 port for computers, notebooks, and handheld held computing devices. Provides high-quality serial connections at transfer rates of more than 500kbps for cell phones, PDAs, digital cameras, modems and ISDN terminal adapters.

- Supports RS-232 serial interface, automatic handshake mode, remote wake-up and power management
- Provides a 96-byte buffer for each upstream and downstream data transfer
- Has a 7" cable with DB25 male connector and a 14" cable with USB-A connector

System requirements: Windows®98/2000, USB host controlled installed in the system

Part No.	Description	1	5
213006EC	USB-A to serial converter ...	\$29.95	\$27.95

External 3-Port USB Thumbhub

Expand your single USB port to a stacked 3-port thumbhub.

- USB Revision 1.1 compliant
- Downstream port with OCD (overcurrent detection) and OCP (overcurrent protection)
- LED indicators uplink/down port communication, and OCP status
- Supports full speed (12Mbps) and low speed (1.5Mbps) transfer rate • Self-powered mode
- Compatible with Windows® 98/98SE/2000/ME/MAC OS 8.5
- Size: 3.1"L x 0.8"W x 1.2"H

Part No.	Description	1	10
208451EC	3-port thumbhub	\$18.95	\$16.95

External USB 2.0 4-Port Hub

This hub allows you to connect and add any USB 2.0 peripherals to your PC. USB 1.1 backward compatible allowing all previous devices that you may have function as usual.

- Supports 1.5Mbps low speed, 12Mbps full speed, and 480Mbps high speed data transfer rate
- One USB-B female upstream port and 4 USB-A female downstream port
- Connects up to 127 devices through cascading multiple hubs • Supports self-powered mode

System requirements: Pentium® 233Mhz or higher and MAC PCs, 64MB of RAM, available USB port, Windows® 98SE/ME/2000/XP/Mac OS

Includes: 5VDC@4A power supply, USB-A male to USB-B male cable, and manual

Part No.	Description	1	10
209007EC	4-port hub	\$41.95	\$38.29

External 7-Port USB Hub

- 7 USB-A female output ports
- USB-B female root port
- Plug & Play compatible
- Allows you to attach 127 USB devices to your PC
- LED indicators for port, status, and power
- Size: 7.9"L x 2.8"W x 1.1"H • Weight: 2.6 lbs.

Includes: 6VDC power adapter and USB-A male to USB-B female cable

Part No.	Description	1	10
191450EC	7-Port USB hub	\$44.95	\$33.75

USB Cables



USB-A Male to USB-B Male

Part No.	Description	1	10	25
175417EC	3' cable	\$4.49	\$3.99	\$3.59
169359EC	6' cable	4.95	4.49	3.95
169367EC	10' cable	5.95	5.25	4.59

USB-A Male to USB-A Male

Part No.	Description	1	10	25
175425EC	3' cable	\$2.95	\$2.65	\$2.39
175433EC	6' cable	4.95	4.49	3.95
175441EC	10' cable	5.95	4.49	3.15

USB-A Male to USB-A Female Extension

Part No.	Description	1	10	25
199806EC	10' cable	\$5.95	\$4.49	\$3.15

USB-A to Joystick (DB15) Adapter

- Fully compatible with any 15-pin game port PC game controller
- Mode switch selector for maximum compatibility and flexibility
- USB Plug & Play
- Input connector: USB-A male
- Output connector: DB15-pin female connector
- Size: 3.2"L x 2.3"W x 1.3"H

System requirements: 586 or higher compatible; available USB-A port or Hub; Windows® 98 or higher

Includes: Manual and 3.5" drivers

Part No.	Description	1	10
189510EC	USB to game port adapter	\$39.95	\$28.95

USB Gender Adapter

USB-A to USB-B

- USB-A (female) to USB-B (male)

Part No.	Dimensions	1	10	25
169375EC	1.7"L x 0.6"W	\$6.95	\$6.35	\$5.59

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See our latest additions of USB Products on the web.



Video and Monitor Cables

RGB Video Cables

- 75Ω coaxial cable; 6' or 10'
- Pin 1 red, pin 2 green, pin 3 blue, pin 14 white/black vertical, pin 13 gray horizontal
- 5 BNCs to HDDB15-pin male

Part No.	Description	1	10	25
73648EC	6' cable (black)	\$19.95	\$17.95	\$16.15
118068EC	10' cable (black)	31.95	28.95	21.95

VGA Monitor Cables

- Connects video card to VGA monitor
- IBM PC/XT and higher compatibles
- HDDB15 male to male

Part No.	Description	1	10	100
66173EC	6' monitor cable	\$6.49	\$5.89	\$5.29
148523EC	10' monitor cable	6.95	6.25	5.59

VGA Monitor Extension Cables

- Extends VGA monitor cable; HDDB15 male-to-female
- IBM PC/XT and higher compatibles
- 134041EC: HDDB15 female with hex nuts and HDDB15 male with thumbscrews
- 66165EC/148531EC: Thumbscrews on each end

Part No.	Description	1	10	100
134041EC	6' screws/hex nuts	\$4.49	\$3.95	\$3.49
66165EC	6' thumbscrews	6.59	5.95	5.35
148531EC	10' thumbscrews	7.49	6.79	5.99



Do you see what you are looking for?

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DB9 Extension Cables

- All lines connected straight through
- 132345EC/196365EC:**
- DB9 female to DB9 female cable with thumbscrews
- 25700EC/148515EC:**
- DB9 male to DB9 female cable with thumbscrews
- 181665EC:** • DB9 male to DB9 male cable

Part No.	Description	1	10	100	1000
132345EC	6' F-F.....	\$4.95	\$4.49	\$3.95	\$3.49
25700EC	6' M-F.....	4.95	4.49	3.95	3.49
196365EC	10' F-F.....	6.95	6.25	5.59	4.95
148515EC	10' M-F.....	7.49	6.79	5.99	4.95

DB25 Extension Cables

- All lines connected straight through
- Use to lengthen your standard serial cable or for switch box applications
- Thumbscrews to secure connectors
- Color: gray; except P/Ns **174001EC/175290EC:** black*



Part No.	Desc.	Wt. (lbs.)	1	10	100	1000
174001EC	3' M-M*	0.6 ..	\$4.79	\$4.35	\$3.89	\$3.49
65787EC	6' M-M	0.5	6.49	5.89	5.29	4.89
39538EC	10' M-M	0.7	6.95	5.59	4.19	2.95
67070EC	25' M-M	1.4 ..	10.95	9.95	8.95	7.95
164291EC	3' M-F	0.4	4.29	3.45	2.59	1.85
175290EC	3' M-F*	0.4	2.95	2.39	1.79	1.25
163133EC	5' M-F	0.6	3.95	3.55	3.19	2.89
67256EC	6' M-F	0.6	6.45	5.79	5.25	4.69
39511EC	10' M-F	0.7	6.95	5.59	4.19	2.95
101995EC	25' M-F	1.4 ..	11.95	9.59	7.19	5.05

IEEE 488 Cables

A variety of cable lengths are offered to ensure that the IEEE system requirements are met (20 meters maximum length with a maximum of 15 devices). These cables are standard IEEE 488 cables with stackable 24-pin GPIB connectors on both ends.



Part No.	Description	Wt. (lbs.)	1	10	25
73154EC	1 meter	0.8	\$36.49	\$32.79	\$29.49
115781EC	2 meter	1.2	37.95	34.19	30.95
115801EC	4 meter	2.0	34.95	26.25	18.39

PS/2 Keyboard Extension Cables

- Color: beige
- PS/2 computers
- 6-pin mini DIN female-to-male



Part No.	Description	1	10	100
28548EC	PS/2 6' non-coiled	\$4.35	\$3.89	\$3.49
111053EC	PS/2 10' non-coiled	5.49	4.99	4.39

AT-to-PS/2 and PS/2-to-AT Keyboard Adapter Cables**28003EC:**

- Connects AT-type keyboards to PS/2
- 5-pin female DIN to 6-pin male mini DIN

85500EC:

- Connects PS/2 keyboard to AT
- 6-pin female mini DIN to 5-pin male DIN connectors



Part No.	Length	Color	Wt. (lbs.)	1	10	100
28003EC	7.3"	Beige	0.6 ...	\$3.95	\$3.49	\$3.15
85500EC	11.3"	Beige	0.8	5.39	4.85	4.39

RJ11 & RJ45 Retractable Cables

These auto-reel retractable cables are compact and convenient solutions for the mobile professional.

**208362EC: RJ11 type**

- For telephone and modem applications
- Cord length: 9'6"
- Includes: Inline coupler

208371EC: RJ45 type, Cat 5

- For telephone, modem & networking applications
- Cord length: 6'11"



Includes: RJ45 right angle adapter and RJ45 to telephone outlet adapter

Part No.	Description	1	10
208362EC	RJ11 cable	\$9.95	\$8.95
208371EC	RJ45 cable, Cat 5	19.95	17.95

Save Space! Slim-Line D-Sub Gender Changers

These revolutionary slim-line gender changers are only 0.69" wide, eliminating the space problems caused by standard gender changers. When plugged into your existing cable, they add only 0.44" to the cable. All-metal cases.

- Captive locking screw (male)
- Captive locking nut (female)
- Grounding tangs (male)

Part No.	Description	1	10	100
18497EC	D-sub 9-pin male	\$4.95	\$4.49	\$3.99
18489EC	D-sub 9-pin female	4.95	4.49	3.99
119319EC	D-sub 15-pin female HD....	4.29	3.89	3.49
119301EC	D-sub 15-pin male HD	4.95	4.49	3.95
18446EC	D-sub 25-pin male	4.95	4.49	3.99
18420EC	D-sub 25-pin female	4.95	4.49	3.99

AT and PS/2 Keyboard Adapters**159089EC:**

- AT keyboard adapter
- Connects PS/2 keyboard to AT
- 6-pin female mini DIN to 5-pin male DIN

**157930EC:**

- PS/2 keyboard adapter
- Connects AT type keyboards to the PS/2
- 5-pin female DIN to 6-pin male mini DIN (PS/2)



Part No.	Length	Housing	1	10	100
159089EC	1.6"	Metal	\$3.49	\$3.15	\$2.85
157930EC	1.7"	Plastic/metal	3.49	3.15	2.85

Switch Box Adapter Cables**177261EC:**

- 2' gray 6-pin mini DIN M-M non-coiled cable for P/N 79177 switch box, see website

114913EC:

- 5' gray 5-pin DIN M-M coiled cable for P/N 114155 switch box, see website

**174772EC:**

- 6' black 6-pin mini DIN M-M

- 174908EC:** • 6' gray 6-pin mini DIN M-M

- 112627EC:** • 10' gray 6-pin mini DIN M-M non-coiled cable for P/N 79177EC switch box, see website

Part No.	Description	Length	1	10	50
177261EC	6-pin mini DIN	2' (gray) ..	\$2.95	\$2.25	\$1.59
114913EC	5-pin DIN	5' (gray) ..	4.95	4.49	3.95
174772EC	6-pin mini DIN	6' (blk)	4.95	3.69	2.59
174908EC	6-pin mini DIN	6' (gray) ..	5.75	5.15	4.65
112627EC	6-pin mini DIN	10' (beige)	7.95	7.25	6.49
205655EC	6-pin mini DIN	25' (beige)	8.95	7.95	6.95

Serial Null Modem Cables

- Molded type connectors
- Weight: 0.4 lbs.
- Color: gray
- Length: 10'

180697EC Pin outs:

1-7 & 8; 2-3; 3-2; 4-6; 5-5; 6-4; 7 & 8-1

180582EC Pin outs:

2-2; 3-3; 4-5 & 6; 5-7; 6 & 8-20; 7-8; (Serial Printer Null Modem)

Part No.	Description	1	10	50
180697EC	DB9 F to DB9 F	\$6.79	\$6.09	\$5.49
180582EC	DB25 M to DB9 F	6.69	6.05	5.45

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Fax: 1-800-237-6948

Online: www.Jameco.com

ATX 150-Watt

- Output:
 - +3.3V @ 6A
 - +5V @ 10A
 - +12V @ 6A
 - +5VSB @ 0.72A
 - 5V @ 0.2A -12V @ 1A
- 20-pin ATX form factor
- Mating input conn.: suggest using P/N 38050EC power cord, pg 25 – not included • Built-in fan
- Input volt.: 115/230VAC @ 50-60Hz (auto switching) • Power on/off switch

Part No.	Product No.	1	10	25
196189EC	MPW-6150F	\$34.95	\$31.49	\$27.95

ATX 250-Watt

- Output:
 - +5V @ 20A
 - +12V @ 10A
 - 5V @ 0.5A
 - 12V @ 0.5A
- Fits popular mini-vertical and desktop cases
- Input voltage: 110-220VAC @ 50-67Hz (switchable)
- AT compatible connectors
- One-year warranty
- Size: 5.5"L x 5.9"W x 3.4"H
- Weight: 2.0 lbs.

Part No.	Prod. No.	1	10	25
174465EC	LC250C	\$49.95	\$44.95	\$39.95

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Part Number	Mfr.	Product Number	Watts (W)	Output (VDC/A)	Input (VAC @ Hz)	Input Connector (Mating Connector/Cord)	Output Connector (Mating Connector)	Certification	Size (L" x W" x H")	Wt. (lbs.)	Pricing		
											1	10	25
196189EC	Emaos	MPW-6150F*	150	+3.3/6, +5/10, +12/6, +5VSB/0.72, -5/0.2, -12/1	115/230 @ 50-60 switchable	3-prong AC receptacle (P/N 38050EC, pg 25)	ATX	UL/CUL/TUV/CE	7.5 x 4.0 x 1.6	2.5	\$34.95	\$31.49	\$27.95
196111EC	SPI	FSP23560GT	235	+3.3/14, +5/22, +12/8, +5VSB/0.8, -5/0.3, -12/0.8	100/240 @ 50-60 switchable	3-prong AC receptacle (P/N 38050EC, pg 25)	ATX	UL/CUL/TUV/CE	5.6 x 5.9 x 3.4	3.2	34.95	26.25	18.35
152514EC	High Power	JE8250	250	+3.3/16, +5/25, +12/10, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	5.5 x 5.9 x 3.4	3.3	44.95	39.95	36.39
174465EC	Logic Concept	LC250C*	250	+5/20, +12/10, -5/0.5, -12/0.5	110/220 @ 50-67 switchable	3-prong AC receptacle with 6' power cord	AT	UL/CSA/TUV/CE	5.5 x 5.9 x 3.4	2.0	49.95	44.95	39.95
152194EC	American Media	JE2031	250	+3.3/14, +5/25, +12/10, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	6.0 x 5.5 x 3.4	3.5	49.95	44.99	40.49
155539EC	American Media	JE2033	300	+3.3/14, +5/30, +12/8, +5VSB/1.5, -5/0.5, -12/0.5	115/230 @ 50-60 switchable	3-prong AC receptacle with 6' power cord	ATX	UL/CSA/TUV	5.9 x 5.5 x 3.4	3.7	69.95	62.95	56.95

* See photo above

Computer Switches, Sharing Devices & Converters

ATEN SVGA Monitor Splitters

Duplicate a video signal from one source to monitors up to 210 feet away.

- Suitable for SVGA, VGA & multisync monitors
- 176866EC: 2-channel
- 1 HDB15 male connector from PC to box, 2 HDB15 female connectors from box to monitors
- 133866EC
- Size: 6.6"L x 3.3"W x 1.1"H • Weight: 1.4 lbs.
- 133866EC: 4-channel
- Slide switch for video signal gain control
- Daisy chainable • One-year warranty
- Size: 8.8"L x 6.0"W x 1.9"H • Weight: 3.6 lbs.

Includes: Power adapter and manual

Part No.	Description	1	10
176866EC	2-channel monitor splitter	\$49.95	\$44.95
133866EC	4-channel monitor splitter	68.95	61.95

Bidirectional Non-Buffered Serial-to-Parallel Converter

- Bidirectional conversion of parallel and serial signals
- Serial interface: hardware handshake XON/XOFF, software handshake XON/XOFF, selectable; parity: odd, even, or no parity; data bits: 7, 8
- Connectors: one DB25 female and one Centronics 36-pin male
- Stop bits: 1 or 2 • Baud rate: 300 to 38,400bps

Includes: AC adapter (9VAC @ 200mA) and manual

Part No.	Description	1	10	25
116935EC	Bi-converter	\$49.95	\$44.95	\$39.95

ATEN K/V/M Switch Boxes for up to 4 Computers

- Selects any computer by hot keys or switch
- Serial and PS/2 mouse & keyboard emulation for automatic PC boot up
- Three stage cascable for accessing more computers
- Supports SVGA, VGA and Multisync monitors
- Keyboard LED status recorded and restored while switching among computers
- Auto scan for monitoring PC periodically
- One year warranty
- Size (149382EC): 9.0"L x 6.0"W x 2.0"H (149391EC): 10.0"L x 7.0"W x 3.0"H

Includes: Manual & power supply (9VDC @ 600mA)

Part No.	Description	Wt. (lbs.)	1	10
149382EC	2 computers	4.0	\$149.95	\$129.95
149391EC	4 computers	7.1	\$229.95	\$209.95

Find it @ www.Jameco.com

See our website for more Switch Boxes and Converters.



2-Way & 4-Way Monitor/Keyboard/Mouse-to-PC Switch Boxes

HDD15/5-Pin DIN/DB9M

- Allows 2 or 4 users to share one PC system
- Internal diodes maintain keyboard in powered state when switching between systems
- Each user may need 2 or 4 sets of the following cables: P/N 66173EC, DB15HD M-M for monitor; P/N 114913EC, 5-pin DIN M-M for keyboard; P/N 132345EC, DB9 F-F for serial mouse (cables, pg 56)
- Size: 7.5"L x 5.3"W x 2.8"H

Part No.	Description	Wt. (lbs.)	1	10
132249EC	2-user switch box	1.6	\$17.95	\$15.95
134017EC	4-user switch box	2.3	21.95	19.95

Monitor/Mouse/Keyboard Cables

- 6' or 32'
- HDB15 male/female for monitor, 5-pin DIN male/female for keyboard, and DB9 male/female for mouse



Part No.	Description	Wt. (lbs.)	1	10
141284EC	6' cable	1.6	\$22.95	\$19.95
141276EC	32' cable	4.8	39.95	35.95

Keyboard/Monitor-to-PC Switch Box

HDDB15/5-Pin DIN Female

- 2-way switch box
- For 2 PCs connected to 1 keyboard and 1 monitor – diodes maintain keyboard in powered state
- Size: 6.0"L x 4.0"W x 2.3"H
- Weight: 1.3 lbs.



Part No.	Description	1	10
114155EC	2 computers	\$14.95	\$13.49

Serial Port-to-PC Switch Boxes

DB9 Female

- Connects 2 or 4 serial ports to a PC
- 79126EC: 2-serial port switch box
- Size: 6.0"L x 4.8"W x 2.5"H
- Weight: 1.2 lbs.
- 183417EC: 4-serial port switch box
- Size: 6.1"L x 4.0"W x 2.2"H
- Weight: 1.3 lbs.



Part No.	Description	1	10
79126EC	2-serial port switch box	\$9.95	\$8.95
183417EC	4-serial port switch box	19.95	17.95

Parallel Printer-to-PC Switch Boxes

DB25 Female

- Connects 2 or 4 PCs to one printer
- 20095EC: 2-PC switch box
- Size: 6.0"L x 5.8"W x 2.3"H
- Weight: 1.3 lbs.
- 155512EC: 2-PC switch box
- Size: 7.2"L x 4.9"W x 2.5"H
- Weight: 2.3 lbs.
- Includes: DB25 M-M cable
- 20124EC: 4-PC switch box
- Size: 6.0"L x 4.0"W x 2.4"H
- Weight: 1.5 lbs.



Part No.	Description	1	10
20095EC	2 PC switch box	\$8.95	\$7.95
155512EC	2 PC switch box	6.49	5.85
20124EC	4 PC switch box	14.95	13.49

4 & 2-Port Auto Printer Switches

- Connects up to 4 PCs to 1 printer or 4 printers to 1 PC
- Non-powered
- Compact size
- Auto form-feed selectable
- Transparent to user
- 177421EC: bidirectional; 3.5" software included; 5 DB25 female connectors
- 177412EC: 5 DB25 female connectors
- 177404EC: 3 DB25 female connectors



Part No.	Description	1	10	25
177421EC	1 to 4 or 4 to 1	\$7.75	\$6.96	\$6.26
177412EC	4 to 1 printer	6.49	5.82	5.23
177404EC	2 to 1 printer	3.59	3.25	2.95

19" Rack Mount Enclosures

Perfect for equipment setup in home, studio or laboratory.

- Ventilation holes on all sides
- Front and back panels are steel w/ aluminum, pre-punched face plates
- Top, bottom, sides durable 0.035" steel
- Front panel: 0.12" Thick • Black front panel
- All enclosures have handles except P/N 132812EC

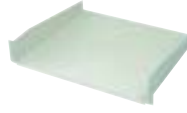


Includes: Mounting screws

Part Number	Dimensions (In.)			Weight (lbs.)	Pricing	
	H1	H2	D		1	10
132812EC	1.73	1.25	9.75	6.2	\$39.95	\$35.99
132821EC	3.46	3.0	9.75	7.9	47.95	43.49
132839EC	3.46	2.88	11.75	9.1	53.95	48.59
132847EC	5.22	4.75	11.75	10.6	54.99	49.49
132855EC	5.22	4.75	13.50	11.8	73.95	66.95

Cabinet Mounting Plate for 19" Cabinet

- Use as industrial chassis mounting plate for servers, PCs or patch panels
- Made of industrial grade steel and aluminum
- Size: 19.0"W x 15.8"D x 3.5"H • Color: beige



Part No.	Description	1	10
149500EC	Cabinet mount plate	\$39.95	\$35.95

Removable HD Rack and Insert

- For quick drive swapping
- Removable storage for 3.5" IDE drive
- Power LEDs
- Keylock for security
- 196040EC: Size: 5.8"W x 8.5"D x 1.5"H
- Weight: 1.2 lbs.
- 196031EC: Size: 4.1"W x 7.5"D x 1.6"H
- Weight: 0.8 lbs.



Includes: Inner cable with IDE connector

Part No.	Description	1	10	25
196040EC	IDE rack w/ insert ..	\$27.95	\$20.95	\$14.69
196031EC	Insert for 196040EC	19.95	17.99	15.99

19" Cable Management Racks

Make your cable looms neat and organized with our 2 unit cable management rack. Simply slip in the cable between spaces and route them to their destinations.



Part No.	Description	1	10
208776EC	Ducting type cable holder	\$21.95	\$19.95
209031EC	C clamp type cable holder	21.95	19.95

Discover More
@ www.Jameco.com

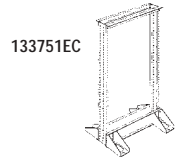


More Computer Rack Mount Hardware and Cases on our website. Log on today to see complete listings.

Relay Rack & Rack Panels

Rack:

- Black powder coat finish
- 10-32 threaded holes
- Used with 19" wide panels
- 16 gauge CRS base
- Size: 84"H
- 1/8" aluminum side rails
- Size (at base): 19.8"W x 15.3"D x 84"H
- 19" Wide Panel:
- 10-gauge black aluminum
- Size: 1.75"H



Part No.	Description	Wt. (lbs.)	1	10
133751EC	Relay rack	21.8	\$179.95	\$161.95
133276EC	Rack panel	0.4	9.45	8.49

IDE Removable 5.25" Rack Kit for 3.5" Hard Drive w/ Fan

- Supports DMA 66 hard drive
- Removable storage for 3.5" hard drives
- LED for power and hard drive activity
- Retaining lock mechanism
- 12VDC @ 50mA fan
- CFM rating: 5.6
- Size: 5.9"W x 8.7"D x 1.6"H
- Weight: 1.3 lbs.



Includes: Mounting hardware

Part No.	Description	1	10	25
170608EC	Rack kit (IDE)	\$29.95	\$26.95	\$23.95

19" Rack Mount Drawer with Keyboard and Trackball

- Occupies a single unit (1U) rack space
- 5-pin DIN connector for keyboard and DB9 connector for trackball
- Color: gray
- Size: 19"W x 13"D x 2.8"H
- Weight: 18 lbs.



Includes: Wrist pads, module and software

Part No.	Description	1	10
150471EC	Rack mount KB drawer	\$249.99	\$224.99

Don't worry about back orders.
Over 99% of our products are in stock!

Power Strip Outlet Saver

With our high quality power strip outlet saver, you can use all the outlets on your surge suppressors, UPS, and outlet strips. Just plug a bulky power adapter into this cable and free up your other outlets.



Part No.	Description	Length	Cord Type	1	10	100
199777EC	AC Power cord (black)	1'	SVT	\$1.69	\$1.55	\$1.35
208338EC	AC Power cord (beige)	1'	SVT	1.69	1.55	1.35

Power Strip Saver Double Outlet

Get full use of your power strips. Plug those bulky adapters into these cables and plug the cables into the power strip. Need the extra adapter to be plugged into the power strip? Use the "Y" power strip saver to add an extra adapter.



Part No.	Description	1	10	100
208346EC	Power strip saver	\$2.89	\$2.75	\$2.59

TRIPP-LITE isobar® Surge Protectors



139686EC



185113EC

The world's best known, most advanced surge protectors provide total protection against surges, spikes and line noise.

- Up to \$50,000 Ultimate Lifetime Insurance covers Isobar and connected equipment against surge damage for life!
- Diagnostic indicators on Ultra versions alert you to improper outlet wiring, loss of AC power, and damage to protection circuitry
- "Cascade Circuitry" allows you to chose increased noise protection level for your most sensitive equipment • UL 1449 and 1283 listed • Lifetime warranty
- IsoTel model has dual RJ11 jacks for complete modem/fax surge protection
- 4-outlet protectors: 6' cord; 8 and 12-outlet protectors: 12' cord

Isobar Premium 19" Rack Mount Surge Protector

Part No.	Product No.	Joules	Description	Wt. (lbs.)	1	10
139686EC	IBAR12RM	750	12 outlet, 2 isolated filters	4.7	\$119.95	\$107.99

Isobar Ultra Premium Surge Protector

19001EC	ISOBAR 8U	2350	8 outlet, 4 isolated filters	3.5	\$69.95	\$62.95
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Isotel AC/Phone Line Surge Protector

185113EC	ISOTEL 4U	2700	4 outlet, 2 isolated filters	2.7	\$39.95	\$35.95
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- Maximum surge voltage: 6000V
- 5 switched AC power outlets, 1 unswitched and 2 RJ11 ports
- Max. energy dissipation: 50 joules/MOV, 150 joules

Part No.	Size (W"xD"xH")	Agency	Wt. (lbs.)	1	10
20159EC	13.9 x 12.7 x 1.7	UL	7.1	\$14.95	\$13.49

Power Base Surge Protector

SALE



POWERWARE 300-VA UPS System With Dual Outlet

- Protects against blackouts and brownouts
- Battery charging: less than 6 hours to 90% usable capacity
- Battery backup time: 5-10 mins. @ full load; 10-20 mins. with partial load
- Input voltage: 120VAC @ 60Hz
- Output voltage: 120VAC
- Output current: 2.5 amps (full load)
- Size: 3.4"W x 5.8"D x 13.2"H
- Weight: 12.4 lbs.

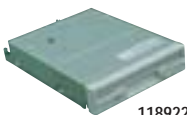


Part No.	Product No.	Description	1	10
179961EC	PRB300A	300-VA UPS system	\$59.95	\$53.95

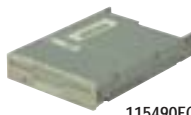
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CD-ROM, Floppy, Hard Drives and Accessories

1.44MB 3.5" Internal Floppy Disk Drives



118922EC



115490EC

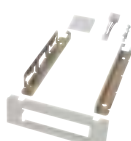
- IBM PC/XT and higher compatibles
- Compatible with DOS versions 3.3 or higher
- Determines if disk is high or low density
- Size: 4.0"W x 5.9"D x 1.0"H (actual drive size)

Part No.	Mfr. Cross Ref. No.	Mfr.	Color	1	10
118922EC	MPF520-1	Sony	Beige	\$29.95	\$26.95
115490EC	FD235	TEAC	Beige	21.95	19.95
189000EC	D35973	Mits.	Black	17.95	15.95

3.5" Drive Mounting Kit

- For mounting a 3.5" floppy drive into a 5.25" slot

Includes: Beige faceplate



Part No.	Description	1	10	50
32088EC	Drive mounting kit ...	\$7.69	\$6.95	\$6.25

Internal IDE CD-ROM Drives

- 5.25" half-height design
- One-year warranty
- Manufacturer varies

Includes: Audio cable

Part Number	Speed	Buffer	kB/sec.	Wt. (lbs.)	1	10
181745EC	24X†	128kB	3600	2.3	\$29.95	\$26.99
149307EC	24x	256kB	3600	2.6	34.95	32.95
189051EC	32x	128kB	4800	2.6	34.95	31.49
189069EC	40x	128kB	6000	2.6	39.95	35.95
189819EC	40x*	128kB	6000	2.6	34.95	24.49
162042EC	44x	128kB	6600	2.5	44.95	31.49
189077EC	48x	128kB	7200	2.6	49.95	44.95
189448EC	56x	128kB	8400	2.3	59.95	53.95

* Black faceplate

† Slot type

‡ Pull

Our complete selection is
@ www.Jameco.com

Internal CD-R/RW Drives

Floppy disks & ZIP disks do not have enough space for files in today's technology. With files bigger than 1MB there is not enough space for audio files, video files, and photos. With this internal CD-R/RW you can save your files with capacities of up to 760MB on a single CD.

- Standard EIDE/ATAPI interface
- Supports Ultra DMA/33
- 5.25" half-height design

System requirements: PC486/33 or higher, 8MB of RAM, Windows® 95/98/ME/NT4.0/2000

Includes: Installation guide, CD-R & CD-RW disks, audio cable, mounting screws & CD-ROM drivers

Part No.	Description	Wt. (lbs.)	1	5
213209EC	32x12x48x	2.7	\$84.95	\$79.95
198774EC	50-pack CD-R (700MB)	2.0	11.95	10.75



213209EC



198774EC

IDE, EIDE & SCSI Hard Drives**PC/XT/AT and Compatibles**

- IDE drives over 528MB require EIDE controller or higher
- Manufacturers may vary and capacity may exceed specification; we carry Seagate, Western Digital, IBM and others.
- All are 1" in height

SALE

Part No.	Capacity	Description	Conn. Pins	Wt. (lbs.)	Average Access Time (ms)	Warranty	1	10
115764EC	425MB	3.5" IDE	40	1.7	12.5	3 mos.	\$79.95	\$71.95
118949EC	850MB	3.5" IDE	40	1.7	14	1 year	84.95	75.95
124978EC	1.27GB	3.5" IDE	40	1.1	14	1 year	79.95	71.95
146325EC	1.7GB	3.5" IDE (Fast ATA-2)	40	1.1	12	1 year	99.95	89.95
146333EC	2.5GB	3.5" EIDE (Fast ATA-2)	40	1.0	11	1 year	99.95	69.95
151036EC	3.2GB	3.5" EIDE (Ultra DMA33)	40	1.1	11	1 year ...	114.95	105.95
151044EC	4.3GB	3.5" EIDE (Ultra DMA33)	40	1.1	11.5	1 year ...	119.95	109.95
151052EC	6.4GB	3.5" EIDE (Ultra DMA33)	40	1.1	9.5	1 year ...	129.95	116.95
162261EC	8.45GB	3.5" EIDE (Ultra DMA33)	40	1.2	9.5	1 year ...	139.95	125.95
189085EC	1.0GB	SCSI	50	1.3	9.6	3 mos.	39.95	35.95

** Pull

EZ/CDPrint Printer

Introducing the EZ/CDPRINT, the first printer that delivers a low-cost way to create professionally printed CD-R's, Credit Card CD-R's, CD Jewel case liner notes and standard color paper documents. Don't settle for unsightly felt pen scribbles or hard-to-use labels on your CD's. Now print full color images, photos, and text directly on your CD in less than a minute. EZ/CDPRINT is ideal for amateur musicians, family photos, school projects, customer presentations, interactive training or anywhere an extra edge of professional presentation counts.

- Prints a full color CD in about a minute
- Compatible with all inkjet printable CD-R & DVD-Rs
- Special PC and Mac software and templates to print CD, liner notes and more
- Both USB and parallel port connections • Uses standard C60/C62 Epson inkjet cartridges
- Prints paper documents at 12ppm monochrome & 7ppm color • Printer size: 18.0"W x 8.0"D x 7.0"H

Requires: Windows® 95/98/2000/ME/XP, Mac OS 8.1 or higher operating systems**Includes:** Printer, PC and Mac printer and template software, three printable disks

Part No.	Description	1	5
213372EC	CD printer (software, cable, ink cartridges and CD-R's)	\$358.95	\$338.95
213381EC	50 pk. 40x 700MB 80 min. CD-R	24.95	23.69
213410EC	Black C60/C62 ink cartridge	29.95	29.95
213401EC	Color C60/C62 ink cartridge	29.95	29.95

Thermoelectric Cooler Chips

- Cools down to -30°C (dependent on external temperature)
- T max. = 60°C
- 20 AWG wire leads, 4" long
- Heat or cool by changing direction of current
- Operating voltage: 15.4VDC nominal

SALE

172048EC



Part Number	Mfr. Cross Ref. No.	Couples*	Watts	Voltage (max.) DC	Current (max.) A	Size (L" x W" x T")	Pricing	
							1	10
172030EC	TEC30	71	19.7	8.4	4	1.2 x 1.2 x 0.2	\$19.95	\$17.95
172048EC	TEC40	127	35.6	15.4	4	1.6 x 1.6 x 0.2	25.95	22.95
172056EC	TEC50	127	79.1	15.4	8	2.0 x 2.0 x 0.2	41.95	29.39

* Couples: # of P&N type semiconductor pairs connected electrically in series

External SCSI Cables for Complete Connectivity

- For PC/XT/AT and compatibles
- All lines connected

SALE

Part No.	Description	1	10	100
73162EC	Male 50-pin Centronics to male 50-pin Centronics SCSI-I to SCSI-I (6')†	\$6.95	\$5.19	\$3.65
118084EC	Male 50-pin Centronics to male HPDB50 cable SCSI-I to SCSI-II (6')	14.95	13.49	11.95
137568EC	Male HPDB68-pin to male HPDB50-pin SCSI-III to SCSI-II (3')	12.95	11.49	9.95

† Also Macintosh® compatibles, see above for SCSI type connector guide

Computer Card Brackets

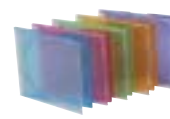
Fig.: 1 2 3 4 5 6

- For securing cards into bus slots
- Fits standard PC/XT/AT cases • Length: 4.75"
- See pg 36 for DB connectors

Part No.	Description	Fig.	1	10	100
11754EC	Blank back panel	1	.. \$1.89	\$1.75	\$1.55
101717EC	For DB9 connector	3	... 1.55	1.45	1.29
101733EC	For DB25 connector	4	... 1.55	1.45	1.29
101741EC	For DC37 connector	5	... 1.55	1.45	1.29
101830EC	For DB9/DB25 conn.	6	... 1.99	1.79	1.59

CD Cases

208485EC



208493EC

Part No.	Description	1	10	100
208485EC	Slim black 10 pk.	\$3.99	\$3.59	\$3.19
208493EC	Slim asst. color 10 pk ...	4.95	4.45	3.95

Back Panel PC Cooling Fan

- Type: sleeve axial fan
- Back panel mountable
- Operating volt.: 12VDC @ 140mA
- Airflow: 43 CFM
- Noise ratio: 26dBA
- Power: 1.7W
- 10.5" wire with 4-pin Molex power connector
- Size: 4.3"L x 3.5"H x 1.1"Thick • One-year warranty



Part No.	Description	1	10	50
152240EC	PC cooler fan	\$19.95	\$17.95	\$15.95

ATX Power Supply 15" Extension Cable

- For use with ATX power supplies
- 20-pin ATX male and female connectors
- Color coded to ATX power supply code
- 15"L x 18 AWG (wires)



Part No.	Mfr. Cross Ref. No.	1	10	100
170237EC	ATX-400-RV	\$6.49	\$5.85	\$5.29

5.25" Disk Drive Power Splitter

- IBM PC/XT and higher compatibles
- Splits 4-line Molex male into 2 females

SALE

Part No.	Drive	AWG	Length	1	10	100
28353EC	5.25"	18	5'	\$2.95	\$2.39	\$1.79

SCSI TYPE / CONNECTOR REFERENCE TABLE

SCSI type	50-pin Centronics DB25	50-pin Header	Half pitch DB50	Half pitch DB68	VHD8 Centronics	VHD8 Centronics
SCSI-I	✓	✓	✓			
SCSI-II			✓	✓		
SCSI-II wide					✓	
SCSI-III					✓	✓
RAID: SCA, SCA-2						✓

See page 19 for Heat Sink Compounds

CPU Heat Sinks and Fans

See page 10 for CPU's



- Excellent for avoiding CPU overheating during extended system on-time
- High efficiency cooling fans • Easy installation – just snap it in

Part No.	Description	Size (H" x W" x D")	Agency Approvals	1	10	50	100
151298EC	Heat sink w/ fan for slot 1 (SECC 1)	4.90 x 2.15 x 1.34	UL/CE/TUV	\$10.95	\$9.89	\$8.89	\$6.95
196242EC	Heat sink w/ fan for socket 7 (ATX)	2.26 x 2.12 x 1.07	UL/CE/TUV	9.95	8.95	7.95	6.95
181278EC	Heat sink w/ fan for socket 7 (ATX)	2.12 x 2.05 x 1.67	UL/CE/CSA	8.49	7.65	6.89	6.19
195784EC	Heat sink w/ fan for socket 7 (AT/ATX)	2.12 x 2.13 x 1.52	—	9.95	8.95	7.95	7.95
196074EC	Heat sink w/ fan for socket 7 (AT)	2.40 x 2.26 x 1.08	UL/CE/TUV	10.95	9.89	10.95	9.89
118092EC	Heat sink w/ fan for 586 CPU w/ snap	2.18 x 2.30 x 1.00	UL/CE/TUV	4.95	3.69	3.49	2.59

DIMM and SIMM Memory

Part Number	Mfr. Cross Ref. No.	Pins	Description	1	10
148398EC					
148443EC					
148398EC	4MBX64SDRAM	168	4M x 64 10ns Syn. DRAM DIMM (32MB)	\$16.95	\$15.95
148401EC	8MBX64SDRAM	168	8M x 64 10ns Syn. DRAM DIMM (64MB)	35.95	32.29
148419EC	16MBX64SDRAM	168	16M x 64 10ns Syn. DRAM DIMM (128MB)	69.95	62.99
130729EC	JEEDO7208	72	2M x 32 60ns SIMM EDO module (8MB)	11.95	8.39
130711EC	JEEDO7216	72	4M x 32 60ns SIMM EDO module (16MB)	24.95	22.95
148443EC	JEEDO7232	72	8M x 32 60ns SIMM EDO module (32MB)	43.95	39.59
148451EC	JEEDO7264	72	16M x 32 60ns SIMM EDO module (64MB)	29.95	28.45
75184EC	P364000-XX-6	72	4M x 36 60ns SIMM module (16MB)	49.95	44.95
75168EC	P364000-XX-7	72	4M x 36 70ns SIMM module (16MB)	45.95	41.49
148460EC	8MBX36-60	72	8M x 36 60ns SIMM module (32MB)	87.95	79.19
53701EC	94000S-70	30	4M x 9 70ns SIMM module (9 chips)	10.15	9.15

Pentium II Class Motherboards

- ATX motherboards are compatible with Intel® Pentium II Processors

SALE

See more @ www.Jameco.com



188091EC



185367EC

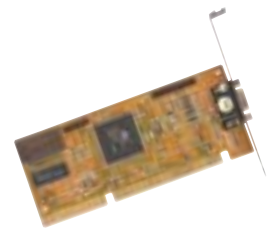
Part No.	188091EC	185367EC
Processor	Slot 1*	Slot 1
Speed	233-333 MHz	233-333 MHz
Chip set	440LX	440LX
BIOS	Award	Award
Memory	EDO (168 pin)	EDO (168 pin)
Capacity	768MB	384MB
Slots	3	3
Speed	66 MHz	66 MHz
Slots		
PCI	4	4
AGP	1	1
ISA	3	3
Interfaces		
Hard Drive	4 EIDE	4 EIDE
Floppy	2	2
USB	2	2
Parallel	1	1
Serial	2	2
IrDA	None	None
Sound	None	None
Keyboard	PS/2	PS/2
Video	None	None
Size	12" x 7.5"	12" x 7.4"
Weight	2.5 lbs.	2.5 lbs.
Price		
	1 \$30.15	\$27.29
	10 \$27.45	\$24.49

* Also supports the Intel Celeron™ processor

ISA 16-Bit Super VGA Card

512KB on Board

- 1024 x 768 resolution in non-interlaced and interlaced modes
- Supports 16 colors; requires 1MB video RAM
- Supports VESA standard graphics & text modes
- Output HDDB15 female (analog)
- Emulates VGA, EGA, CGA, MDA & Hercules modes
- One-year warranty



Requirements: IBM AT and higher compatibles

Includes: 512KB video RAM, expandable to 1MB by adding one P/N 128688EC chips, pg 4; software and manual

Part No.	Description	1	10	25
104660EC	VGA card	\$49.95	\$44.95	\$39.95

VESA 24-Bit Graphics Accelerator Card

1MB on Board



Increases the speed of graphics and windowing programs by up to 15 times that of standard VGA.

- Provides 24-bit true color at 640 x 480 pixels, 16M colors
- Connector: HDDB15 female
- On board memory: 1MB, expandable to 2MB using 256k x 16 DRAM P/N 128688EC, pg 10
- Non-interlaced/interlaced modes supported
- Weight: 0.7 lbs. • One-year warranty

Requirements: Intel® 486 & higher compatibles

Part No.	Description	1	10
137285EC	Graphics accelerator	\$31.29	\$27.99

PCI Graphics Accelerator Card

- High performance SIS6326 8MB PCI graphics accelerator
- 800K polygon/sec
- Supports texture, transparency, blending, wrapping and mirror, fogging and blending, point sampled, linear and bi-linear texture filtering
- Built-in direct draw accelerator
- Supports per pixel texture perspective correction
- 14-bits resolution in IDCT transformation
- Supports Z & alpha buffer • Size: 5.5"L x 2.5"W
- Built-in NTSC/PAL video encoder • Weight: 0.4 lbs.

Includes: CD-ROM manual and drivers

Part No.	Description	1	10
210833EC	PCI accelerator card	\$39.95	\$35.95

Jameco's Low-Price Guarantee

We'll match the advertised price of any like product. It's that simple!

QTRONIX. Win 95 104-Key Keyboard with Jumbo Trackball


- PC/AT and PS/2 compatible w/ DOS 3.0 or higher
- "N-Key" roll-over for quick typists
- Tactile click sound and feel • Weight: 3.7 lbs.
- Size: 19.0"L x 6.8"W x 1.4"H • One-year warranty

Includes: Software and AT cable adapter

Part No.	Description	1	10	25
128717EC	Scorpius 35PM/NET ...	\$99.95	\$90.95	\$84.95

COMPAQ 101-Key Keyboard


- For PS/2 systems
- Tactile touch
- LED indicators for Num, Caps, and Scroll lock
- 12 function keys with separate cursor and numeric keys
- Recommend using adapter P/N 85500EC or P/N 159089EC, pg 56
- Size: 18.3"L x 6.5"W x 1.3"H • Weight: 3.6 lbs.

SALE

Part No.	Description	1	10	25
191530EC	101-Key Keyboard ...	\$19.95	\$14.95	\$10.95

QTRONIX. 22-Key Serial Keypad

- Tactile click-sound and touch
- Auto repeat function
- 9600 bps, data bits: 8, stop bits: 1, start bit: none, no parity
- Serial DB9 connector
- 2-key rollover
- Color: beige
- One-year warranty
- Size: 6.2"L x 4.2"W x 1.3"H
- Weight: 0.8 lbs.



System requirements: IBM PC/XT or higher compatibles; and MS DOS 3.X

Includes: 3.5" driver diskette and manual

Part No.	Description	1	10	25
129357EC	Scorpius 22RW	\$39.95	\$35.95	\$32.49

QTRONIX. 17-Key PS/2 Keypad

A compact keypad designed for use with IBM compatible laptops and desktop PC.

- Auto-repeat function
- Tactile click-sound and touch
- Switch life of 20 million cycles
- For IBM PS/2 and compatibles
- Two key roll over
- Installs into 6-pin mini DIN keyboard connector (no software required)
- One-year warranty
- Size: 5.6"L x 3.4"W x 0.9"D



Part No.	Description	1	10	25
151811EC	Scorpius 20PB	\$34.95	\$31.49	\$27.95

QTRONIX. PS/2 3-Button Optical Wheel Mouse

- Ergonomic style 3-button optical wheel mouse
- High tech optical sensor for all surface types
- Size: 3.9"L x 2.3"W x 1.5"H



System requirements: IBM PC or compatible, Windows® 98/2000/ME, available PS/2 port

Part No.	Description	1	10	25
199591EC	Optical wheel	\$29.95	\$26.95	\$24.25

QTRONIX. Trackball with Menu Software

- Detachable wrist strap
- Variable resolution (20-6400 dpi)
- One million cycle life tactile switches
- Ergonomic design
- 3.5" disk • One-year warranty
- Size: 5.5"L x 4.6"W x 2.0"H

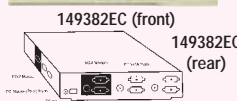


System requirements: IBM PC/XT and higher compatible systems; MS DOS 3.3 or later, Windows® 95

Part No.	Description	1	10	25
128995EC	LIBRA 90 PM NET ...	\$29.95	\$26.95	\$24.25

ATEN K/V/M Switch Boxes for up to 4 Computers

- Selects any computer by hot keys or switch
- Serial mouse, PS/2 mouse & keyboard emulation for automatic PC boot up
- Three stage cascable for accessing more computers
- Supports SVGA, VGA and Multisync monitors
- Keyboard LED status recorded and restored while switching among computers
- Auto scan for monitoring PC periodically



Includes: Manual & power supply (9VDC @ 600mA)

Part No.	Description	Wt. (lbs.)	1	10
149382EC	2 computers	4.0	\$149.95	\$129.95
149391EC	4 computers	7.1	\$229.95	\$209.95

Audio/Video Adapters (CAT 5 UTP)

- Designed to convert impedance of video/audio signals to 100Ω for transmission over CAT 5 UTP cable
- Supports both NTSC or PAL video signals
- Built-in impedance matching device and filter for video and audio signal transmission
- Use with existing premises wiring and wall jacks for easy and cost effective installation
- Transmission distance: 1000' color video, 2000' for B/W video
- Signal pairs: video (BNC), CAT pair 4 (RJ45); audio 1 (RCA), CAT pair 3 (RJ45); audio 2 (RCA), CAT pair 2 (RJ45)



Includes: 1 RCA to BNC adapter & 2 mounting screws

Part No.	Connector Type	1	10
155002EC	BNC/RCA/RJ45	\$42.95	\$38.95

AverKey Pro PC to TV Converter Box

- Converts VGA video or Macintosh® 640 x 480 to standard NTSC
- Built-in flicker filter
- Resolution: 800 x 600
- TV brightness control
- Compatible w/ Microsoft® Windows® 3.0 and higher
- Size: 6.0"L x 4.0"W x 1.0"H
- Weight: 2.2 lbs.



System requirements: VGA-based PC, DOS 3.0 or higher, 640KB RAM or larger

Includes: Compact PC to video converter box, transformer, utilities diskette, cables and manual

Part No.	Description	1	10
167193EC	Video signal pro	\$109.95	\$99.95

SMK RF Modulator

- Output frequency: NTSC Ch. 3/4, switch selectable
- 12VDC RF modulator
- Operating voltage: 12V@ 50mA max.
- RF output impedance: 75Ω (F-type connector)
- Video modulation: 1.0V p-p
- Audio FM deviation: 1.4V p-p
- PC connections: solder tab connectors
- Size: 1.7"L x 1.7"W x 0.7"H • MFG. #: WMN2144-01


SALE

Part No.	Description	1	10	50	100
141639EC	RF modulator ..	\$4.95	\$3.95	\$2.95	\$2.10

480-Watt Multimedia Amplified Speakers

- Input voltage: 120VAC
- 2 speakers
- Magnetically shielded
- 2-channel stereo amplifier
- Push button type power switch with LED indicator
- Knob controls for volume, bass & treble
- Size: 5.5"W x 7.0"D x 9.1"H • Weight: 5.3 lbs.



Part No.	Description	1	10
196066EC	480W speakers	\$39.95	\$35.95

Hands-Free Condenser Microphone

- Cord length: 8'
- Connector: 3.5mm male stereo plug
- Size: 1.9"L x 1.2"W x 0.3"H
- One-year warranty

SALE


Part No.	Description	1	10	50
135247EC	Microphone	\$3.69	\$2.79	\$1.95

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USB WEBCAM Video Camera*With Motion Detection Software*

- Create video images and send via email
- Capture still photos using motion detection software
- USB-A male interface
- Compatible with Windows® 98/ME/2000
- CMOS sensor • Image res.: 352 x 288 pixels
- Up to 30 frames per second • Manual focus lens
- Size: 2.3" diameter • Weight: 1.0 lb.

DEXXA**System requirements:** IBM PC with Pentium®

233MHz or higher compatible, Windows® 98/ME/2000, CD-ROM, available USB port

Includes: Mounting base, installation guide, CD-ROM drivers and software

Part No.	Description	1	10
191775EC	USB WEBCAM	\$24.95	\$22.45

USB PenCam Digital Camera*Still and Streaming Video Capable*

- USB Interface
- Compatible with Windows® 98/2000 and ME
- High resolution 352 x 288 (20 still shots)
- Low resolution 176 x 144 (80 still shots) • 10-second self timer
- Up to 12 seconds of AVI streaming video
- Up to 2-hour battery life (full-time usage)
- Size: 4.8"L x 1.3"W x 0.8"D • One-year warranty

**Requires:** 2 AAA batteries not included (recommend P/N 185279EC, see website)**Includes:** CD-ROM software bundle with Pocket Cam Manager, Photo Express 3.0, Photo Explorer 3.0, COOL 360 1.0, Video Live Mail Plus 3.11b, and Microsoft Net Meeting 5.0; 5' USB cable; camera stand and camera clip

Part No.	Description	1	10
177199EC	Digital PenCam	\$49.79	\$46.49

14" SVGA Color Monitor

- 13" diagonal view
- 0.28mm dot pitch
- HDDB15 male connector
- Power, contrast, brightness, horizontal and vertical position, recall and trapezoid knob adjustments
- Resolution: 1280 x 1024 @ 60Hz
- Input voltage: 100-240VAC @ 50-60Hz
- Size: 14.2"W x 14.6"D x 13.5"H • Weight: 25 lbs.
- Refurbished (mfr. may vary)

**Requirements:** IBM PC/XT or higher compatible**Includes:** Power cable, tilt and swivel base

Part No.	Description	1	10
174537EC	13" diagonal view	\$69.99	\$64.99

4" TFT LCD Monitor*NTSC Format*

- TFT color LCD
- Resolution 234 x 383 dpi
- Backlight: cold cathode fluorescent lamp • Pwr. source: 12VDC @ 400mA
- 5' lead wire w/ 4 position molex type pwr. conn.
- Tint color and brightness adjustable
- Size: 4.1"L x 3.3"W x 0.7"H (display)
- Size: 4.7"L x 3.3"W x 1.3"H (unit) • Weight: 0.7 lbs.



Part No.	Description	1	10
172742EC	4" color LCD monitor	\$159.95	\$149.95

Color Camera Board*NTSC Format*

- 1/3" CCD image sensor
- 330 TV lines • 5.0 lux
- FOV: 92° • 3.6mm lens/F2.0
- Low power consumption
- Automatic exposure, gain and white balance



Part No.	Description	1	10
171011EC	Camera board	\$69.95	\$62.99

Black & White Camera*EIA Format*

- 1/3" CCD image sensor
- 510(H) x 492(V) • S/N ratio: 46dB
- Horizontal resolution: >350 lines
- Scanning system: 2:1 interlace
- Sensitivity: 0.7 lux/F2.0 • FOV: 92°
- Video output: 1Vp-p, composite video 75Ω
- Pwr. supply: 12VDC (recommend P/N 162996EC, website) • Power consumption: 110mA
- Electronic shutter: 1/125,000 sec. (linear)



Part No.	Description	1	10
171029EC	Camera board	\$47.95	\$42.95

Color Interline Camera

- EIA format
- 1/3" CMOS image sensor
- EIA format: 512(H) x 492(V)
- 330 horizontal line resolution
- 2:1 scanning interlace system
- 5 lux sensitivity • FOV: 530
- Video output: 1V p-p; 75Ω
- 6mm lens/F2.0 • S/N ratio: 40dB
- Electronic shutter: 1/60 – 1/1,200 sec.
- Water resistant with adjustable mounting bracket
- Connectors: 1 standard RCA female jack for video, and in-line 2.1mm power-plug connector for power supply • Size: 2.6"L x 0.9"Dia.

**Includes:** Adjustable mounting bracket, instruction sheet and 9V@100mA power supply

Part No.	Description	1	10
185017EC	Color camera	\$99.95	\$89.95

Color Camera

- 1/3" Panasonic CCD image sensor
- Image size: 4.82mm (H) x 3.64mm (V)
- More than 380TV lines horizontal resolution
- 15.734kHz synchronous frequency
- Scanning system: 2:1 interlace
- S/N ratio: more than 46dB • FOV: 42.6°
- BNC connector for video • 1.0 lux / F1.4
- Video output: 1Vp-p; 75Ω
- 512(H) x 492(V) NTSC signal format
- Auto iris: DC driver / video driver switchable
- Size: 4.0"L x 2.2"W x 2.0"H • Weight: 0.9 lbs.

**Requires:** 12VDC @ 140mA power supply (recommend P/N 162996EC, see website)

Part No.	Description	1	10
171248EC	Color CCD camera	\$224.95	\$201.95

2.4GHz Wireless Color CCD Camera*With AES/AI Video Drive*

- 1/3" CCD interline sensor
- 380 TV line resolution
- 512(H) x 492(V)
- Scanning system: 2:1 interlace
- Auto electronic shutter (AES): 1 to 1/100,000 sec
- Auto iris (AI) control video drive switchable
- S/N ratio: more than 48dB
- Video output: 1Vp-p/75Ω
- Impedance output: 75Ω typical
- LED power "ON" indicator at rear panel
- Size: 4.0"L x 2.2"W x 2.0"H
- Color; NTSC format; 2.0 lux/F1.2

174810EC:
Lens not included

208645EC

Includes: 15VDC power supply, antenna, mounting bracket and manual**208645EC:** • Aperture: ±4F=1.4-64
• Auto Iris direct drive • FOV: 46°

Part No.	Description	1	10
174810EC	Color camera	\$219.95	\$195.95
208645EC	Auto Iris lens	69.95	62.95

4-Channel 2.4GHz Wireless Audio/Video Transmitter System*CCIR, NTSC, PAL, EIA Format*

- ISM band: 2.4-2.483GHz
- Four selectable channel transmitter and receiver
- Audio response: 20Hz-20kHz
- Antenna mode: dipole (omnidirectional)
- Video output: 1V p-p/75Ω composite video
- RCA jacks for audio/video connectors

**Includes:** Two 12VDC @ 500mA w/ 2.1mm x 5.5mm center positive plug, and patch cables**Transmitter:** Size: 3.5"L x 2.5"W x 1.1"H**Receiver:** Size: 5.1"L x 4.0"W x 1.0"H

Part No.	Description	1	10
169631EC	4-ch. wireless system	\$149.95	\$134.95

2.4GHz Wireless Antenna Booster*Extend Video Transmitting Distance*

- Output power: 700mW (±10%)
- Input power: 10mW ~ 60mW
- Consumption 350mA
- Impedance output: 50Ω typical (to antenna)
- Frequency: 2400 – 2500
- Size: 2.2"L x 2.0"W x 0.8"H



215175EC

Includes: 9VDC @ 800mA power supply

179872EC

Part No.	Description	1	10
215175EC	Antenna booster	\$199.95	\$179.95
179872EC	Wireless extension cable	10.99	9.89

Video Text Display Module*NTSC composite (1Vp-p, 75Ω)*

- Serial data input: 2400-19.2kbps • 30-pin SIMM form factor (socket supplied)
- Compatible w/ Parallax Basic Stamp®, see pg 66
- Auto-switching genlock overlay or internal video generation
- Power supply: +8-16VDC @ 65mA input, 5VDC aux. output (regulated)
- Displays up to 308 characters (11 lines of 28) • Asynchronous serial input only @ 9600bps

**SALE**

Part No.	Mfr. Cross Ref. No.	Character Pattern	Size	1	10	25
162051EC	BOBII	12 x 18 pixels	3.5"L x 1.1"H	\$69.95	\$62.95	\$56.65

The Microcontroller Idea Book

The Idea Book introduces low end embedded microcontroller design. It provides practical designs for use with data loggers, controllers and small computer applications. (277 pages, 1997)

- Circuits, programs and applications featuring the 8052-BASIC single chip computer



Part No.	Description	1	10
126375EC	Micro. Idea Book	\$31.95	\$28.95

Practical Electronics Book for Inventors

McGraw-Hill Provides information needed for practical use in a format you can understand. With hand-drawn illustrations, this learn-as-you-go guide shows you what a particular device does, looks like and compares with other similar devices. Provides an easy-to-understand overview of basic components, resistors, diodes, capacitors, inductors, rectifiers, amplifiers, voltage regulators, discrete passive and active devices and so on. (604 pages, 2000)



Part No.	Description	1	10
174529EC	Practical Electronics	\$39.95	\$34.95

IC Projects for Hobbyist and Technicians

Prompt Publishing Written for hobbyists and technicians who are interested in projects for integrated circuits – projects that you will be able to breadboard quickly and test easily. (212 pages, 1997)



Part No.	Description	1	10
143271EC	IC Projects Book	\$24.95	\$22.49

Programming & Customizing PICmicro Microcontrollers

Second Edition

McGraw-Hill Details the features of the PICmicro® and how to use these embedded chips to access and control many different devices. Shows what happens within the PICmicro® when an instruction is executed and how it interfaces with external devices. (1190 pages, 2001)



Includes: CD-ROM and PIC PCB

Part No.	Description	1	10
183046EC	PICmicro Programming	\$49.95	\$44.95

The Microcontroller Application Cookbook - Volume 2

Woodglan Press - Building on the foundations laid on the first volume, this volume contains schematics with complete part numbers as well as sample "code snippets" that demonstrates how each circuit works. This book focuses on the actual circuits and components, leaving the theory process behind and providing you the practical creation of a working circuit. The author has acknowledged Jameco Electronics for providing the components necessary in creating the circuits. (248 pages, 2002)



Part No.	Description	1	10
212847EC	Microcontroller Cookbook Vol 2	\$29.95	\$27.95
181681EC	Microcontroller Cookbook Vol 1	\$29.95	\$27.95

BASIC Stamp Data Book

Newnes Publishing Covers both the hardware and software of the Parallax BASIC stamp I and II microprocessor operation and design. The basic stamp is built on PC microcontroller hardware and uses PBASIC as its programming language which makes it simple to use and modify for beginners and professionals. (305 pages, 2000)



Part No.	Description	1	10
143651EC	Basic Stamp Data Book	\$34.95	\$31.49

PIC Microcontroller Project Book Comprehensive Beginner's Guide

McGraw-Hill Provides you with hands-on directions for putting Microchip's RISC-based chips with up to 8k of memory to work. Starting with simple projects and experiments, this book leads you gradually into sophisticated programming techniques. Provides you guidance on getting the equipment you need and programming your chip. (203 pages, 2000)



Part No.	Description	1	10
174650EC	PIC Beginner's Guide	\$29.95	\$26.95

Electric Motors and Control Techniques

TAB Publishing

Explains how different types of motors operate, and how electronic control devices can be used to improve efficiency in a wide range of applications. (294 pages, 1994)



Part No.	Description	1	10
137162EC	Electric Motors & Control	\$16.99	\$15.29

Robot Builder's Bonanza

TAB Publishing

This fascinating guide offers you a complete, unique collection of tested and proven project modules that you can mix and match to create an almost endless variety of highly intelligent and workable robot creatures. (753 pages, 2001)



Part No.	Description	1	10
137171EC	Robot Builder's Bonanza	\$23.95	\$21.45

Serial Port Complete

Lakeview Research

RS-232 and RS-485 are the most versatile, inexpensive interfaces for linking, but the hardware and programming are often misunderstood. This book provides you with everything you need to design, program, install and troubleshoot the links you set up. (306 pages, 1998)

Includes: 3.5" diskette



Part No.	Description	1	10
154771EC	Serial Port Complete	\$39.95	\$35.95

Everything You Need To Develop Custom USB Peripherals Book

Lakeview (2nd Edition)

This USB Complete book provides an easy-to-use interface for computer peripherals. The book covers topics such as what USB can do, transfer types, chip choices, what's inside a USB controller, writing firmware, how the host communicates and more. (523 pages, 1999)



Part No.	Description	1	10
171900EC	Complete USB Book	\$49.95	\$44.95

Programming and Customizing 8051 Microcontrollers

McGraw-Hill Provides you with a complete understanding of the 8051 chip compatibles along with all the information needed to design and debug applications and control many different devices. Includes over 30 experiments, 12 projects and CD-ROM featuring source code and PDF data sheets. (541 pages, 1999)



Part No.	Description	1	10
161402EC	Program/Customizing	\$29.99	\$26.99

Oscilloscope Guide Book

Prompt Publishing This book's full illustrations and diagrams bring oscilloscopes to life. Learn how to use them to conduct many tests and measurement techniques. This book answers questions about various types of oscilloscopes and how to obtain useful test results. (214 pages, 2001)



Part No.	Description	1	10
185404EC	Oscilloscope Guide Book	\$29.95	\$26.95

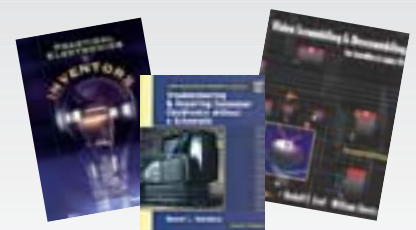
TTL Logic Data Book

Texas Instruments Contains specifications and technical information on a broad line of TTL integrated circuits including Schottky TTL circuits. (1240 pages, 1988)



Part No.	Description	1	10
88225EC	TTL Logic Data Book	\$34.95	\$31.49

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Long-Lasting NiMH Batteries and Chargers

MILLENNIUM



Lasts 10-30 times longer than Rechargeable Alkaline!

Now you can reuse longer-lasting, money saving NiMH rechargeable batteries instead!

NiMH Batteries

Part No.	Description	1	10	25	100
185261EC	4x AA, 1600mAh	\$13.95	\$12.49	\$11.25	\$9.95
197000EC	2x C, 2300mAh	9.95	8.95	8.15	7.29
196998EC	2x D, 2300mAh	9.95	7.99	6.99	5.99
197018EC	1x 7.5V, 150mAh	9.95	8.95	8.15	7.29

NiMH Chargers

Part No.	Description	1	10	25	100
185308EC	AA charger (4 free)	\$21.95	\$19.95	\$17.95	\$15.95
185295EC	Universal charger	21.95	19.95	17.95	15.95

Replacement Battery **SALE**

- Lithium half AA • Amps: .85A-h
- Voltage: 3.6V (Tadiran) • Diameter: .579"

Part No.	Description	1	10	25	100
126754EC	Lithium half AA ..	\$6.95	\$6.29	\$5.65	\$5.09

Lithium, Zinc Chloride and Alkaline Batteries

Applications: personal computers, workstations, test equipment, feature telephones, copiers, fax machines, video scramblers/descramblers and remotes.

151095EC



198791EC



33398EC



Part Number	Mfr. Cross Ref. No.	Description (V/Amp-hours/Dia.)	Battery Type	Terminals/Connection	Pricing			
					1	10	25	100
151095EC	GF6F22	9.0V/0.3A-h/1.0"L	Zinc chloride	Standard 9V	\$1.25	\$.99	\$.79	\$.65
198791EC	MN1604	9.0V/.5A-h	Alkaline	9V	2.59	2.35	2.15	1.85
126754EC	TL5101S	3.6V/.85A-h/.579"	Lithium	Half AA (Macintosh*)	6.95	6.29	5.65	5.09
33398EC	TL5104P	3.6V/1.9A-h/.579"	Lithium	Barrel w/ lead (clock/memory)	5.95	5.49	5.19	4.85
33427EC	TL5242W	3.6V/1.9A-h	Lithium	Battery pack w/ plug (PC)	9.95	8.95	7.15	5.39
14162EC	CR2032	3V/180mA-h/.787"	Lithium	Coin cell (clock/memory)	1.25	1.00	.75	.53

SALE

TEMPEST Lead Acid Batteries

- .187" color-coded terminals (except P/N 159679EC - .470")
- Sealed • UL approved
- Rechargeable • Two-year warranty

Tempest is an ISO-9001 Certified Company



155328EC

155336EC

159679EC

Part Number	Product Number	Nom. Volt.	Amp-Hrs.	Charging Standby	Voltage Cyclic	Cross Reference			Size L" x W" x H"	Wt. (lbs.)	Pricing	
						Panasonic	YUASA	Eagle Picher			1	10
155328EC	TR4-6	6	4A-h	6.75-6.9	7.2-7.5	LCR6VP	NP4-6	CF16V4	2.8 x 1.9 x 4.0	1.8	\$10.49	\$9.25
159661EC	TR2.3-12	12	2.3A-h	13.5-13.8	14.4-15	LCR12V2.2P	NP2.3-12	CF12V1.5	7.0 x 1.3 x 2.3	1.9	14.95	13.49
155336EC	TR4-12	12	4A-h	13.5-13.8	14.4-15	LCR12V4PF	NP412	CF12V4	3.6 x 2.8 x 4.0	3.4	17.95	16.19
155344EC	TR7-12	12	7A-h	13.5-13.8	14.4-15	LCR12V7.2BP	NP712	CFM12V65	6.0 x 2.6 x 4.0	5.9	17.95	15.95
168188EC	TR12-12	12	12A-h	13.5-13.8	14.4-15	PS12120	—	CFM12V12	5.9 x 3.8 x 3.8	9.0	30.95	26.95
159679EC*	TR18-12	12	18A-h	13.5-13.8	14.4-15	LCR12V17BP	NPG18-12	CF12V18	7.1 x 3.0 x 6.6	13.8	34.95	29.95

*159679EC: Bolt terminals w/ bolt & nut set

KIT ASSEMBLY EXPERIENCE LEVEL: ● = Beginner ■ = Intermediate ▲ = Expert

Kits and Lasers

1 Second to 3 Minute Timer Module

By operating a button, the relay will be activated for the selected time.

CEBEK

- Output contact rating: 5A @ 200VAC
- Size: 3.0"L x 1.7"W x 1.2"H

Requires: Power supply 12V @ 50mA (recommend P/N 100095EC, see website)

Part No.	Description	1	10	25
147871EC	I-1 timer	\$19.95	\$17.95	\$15.95

Computer Control Interface Kit ▲ 301-piece kit

Connects to printer port without interruption of the printer. Works in control applications such as the infrared transit/receiver (P/Ns 120555EC and 120547EC, pg 69).

- 16 I/Os with opto coupler
- Analog outputs: eight 8-bit (64 steps), one 8-bit (256 steps)
- Analog inputs: four 8-bit (256 steps) • Full opto-isolation with computer
- 3.5" driver disk w/ routines in C++, QBASIC, Turbo Pascal

Requires: DB25 cable (P/N 65787EC, pg 56)

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
128928EC	K8000	9.3"L x 5.3"W	1.7	\$139.95	\$125.95

Universal Relay Card Kit ▲ 64-piece kit

An electronic controller that switches higher currents while providing insulation between the controller and the controlled devices.

- Relay Output: Maximum 5A/220VAC
- Contact Voltage: 12VDC/250mA • TTL or CMOS inputs

Requires: 220 or 125VAC power source

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10
128910EC	K6714	8.3"L x 5.9"W	1.8	\$67.95	\$61.95
144186EC	VR15M121C relay (JZC-22F)		0.028	3.25	2.92

Color Code Legend
SALE REFURBISHED CLOSEOUT

Glass-Lens Red Laser Diode and Line Generator

133292EC: Laser Diode

- Operating voltage: 4.0-6.0VDC (recommend P/N 112070EC, see website)
- Beam size at 7m: oval - 5mm x 8mm
- Wavelength: 660nm • Max. output: 4mW
- Beam divergence: 0.2mrad • Green LED indicator

134148EC



Class IIIa Laser Product

134148EC: 60° Line Generating Lens

- Adjustable focus range: 50 cm to ∞ • Lens construction: 3E.3G (glass)
- Back focal length: 1.5mm • Focal length: 8.0mm • Fan angle: 60°
- Beam divergence: 2.0mrad • Length at 1 meter dist.: 1.70 m

Part No.	Description	1	10	25
133292EC	Glass laser diode	\$44.95	\$39.95	\$35.95
134148EC	60° lens	12.95	11.49	9.95

Laser Diode Module

Class IIIa Laser Product

- Operates on 3VDC @ <5mW
- 670nm wavelength • Beam diameter: 3.2mm
- Working distance: over 50 meters/yards (daylight), 200 meters/yards (dark) • Size: 0.9"L x 0.3"Dia.

Part No.	Description	1	10	25
131203EC	Laser module, brass	\$44.95	\$40.49	\$36.45

Laser Diode and Driver **SALE**

182932EC: Laser Diode

Class IIIa Laser Product

- Optical output power: ≤5mW maximum
- Operating current: 30mA • 5.6mm pkg size
- Operating voltage: 2.6V maximum • Lasting wavelength: 650nm typical
- Beam divergence of 11 degrees from center line maximum

161736EC: Laser driver w/ regulator • Input voltage: 2.6-6VDC • Input current: 40mA

Part No.	Description	1	10	25
182932EC	650nm laser diode	\$11.95	\$10.79	\$9.69
161736EC	Laser driver	7.95	6.95	6.25

BASIC Stamps

BASIC Stamps are small computers using a variation of BASIC to control execution of many applications. The BS1-IC has 8 I/O lines, while the BS2-IC has 16 I/O lines which can be connected directly to buttons, LEDs, registers, and many other TTL level devices. Each allows you to store data in the EEPROM before downloading a BASIC program.

Specifications:	127693EC	130892EC
EEPROM	256 bytes	2048 bytes
RAM	16 bytes	32 bytes
Cur. Draw @ 5V	2mA run/20µA	8mA run/100µA
Microcontroller	PIC16C56	PIC16C57
Program speed	2000/sec.	4000/sec.
# of I/O Pins	8	16 + 2 serial
Package	14-pin SIP	24-pin DIP

140071: BASIC Stamp[®] 2 Starter Kit w/ BS2-IC (27203EC)

Includes the super carrier board, software, manual and programming cable. BASIC Stamp 2 can be connected directly to buttons, LEDs, registers and many other TTL devices.



Part No.	Parallax No.	Wt. (lbs.)	1	10
127693EC	BS1-IC	0.01	\$33.95	\$32.29
130892EC	BS2-IC	0.01	45.95	41.95
140071EC	27203 Kit	1.9	139.95	132.95

50MHz BASIC Stamp 2SX Module

High-speed version of BS2-IC with additional RAM and EEPROM.

- Microcontroller: Ubicom SX28AC
- Program execution speed: 10,000 instructions/sec.
- EEPROM program size: 8 x 2k bytes, 4,000 instructions
- Current draw @ 5V: 60mA run/200µA sleep
- Number of I/O pins: 16 + 2 serial
- RAM size: 32 bytes
- Size: 1.2" L x 0.6" W

Part No.	Parallax No.	1	10	50
159775EC	BS2SX-IC 24-pin...	\$58.95	\$55.95	\$53.19

BASIC Stamp 2P Modules

In addition to the BS2-SX (above) features, includes new commands for HD44780 compatible LCDs, Dallas Semiconductor 1-wire and Philips I2C parts.

- Program execution speed: 12,000 instructions/sec.
- RAM size: 38 bytes
- Scratch pad RAM: 128 bytes
- Program size: 8 x 2k bytes, 4,000 instructions
- Current draw @ 5V: 40mA run; 400µA sleep
- 184911EC: • Number of I/O pins: 16 + 2 serial
- 184920EC: • Number of I/O pins: 32 + 2 serial

Part No.	Parallax No.	1	10
184911EC	BS2P24-IC 24-pin	\$78.95	\$71.95
184920EC	BS2P40-IC 40-pin	98.95	89.95

Visit www.Jameco.com/Kits for our complete selection of kits.

Stamp Works Kit

This all-in-one kit takes you beyond theory, into a well-written collection of 32 experiments that will teach you first class BASIC Stamp programming. You'll learn to get the most out of the BASIC Stamp and to increase its versatility by connecting to popular active and passive components.



Part No.	Parallax No.	1	10
184946EC	27297	\$348.95	\$314.95

BASIC Stamp Prototyping Boards

Optional boards for BS1-IC, BS2-IC and BS2SX-IC Stamps.

- Easy use of Stamp with prototyping area, 9-volt battery clips, I/O header, reset button, and programming connector



130921EC: Use w/ P/N 130892EC, left 164726EC
164726EC: Use w/ P/N 127693EC, 130892EC and P/N 159775EC, left

Part No.	Parallax No.	1	10
130921EC	27120	\$22.95	\$20.95
164726EC	27130	48.95	46.55

Parallax's "Stamps In Class" Series Kits

Enabling Students to "Micro-Control" the World

Learn BASIC Stamp programming essentials from the experts. Each kit combines an educational book with the components needed to cover robotics, process control and microcontroller interfacing. The program emphasizes creative PBASIC programming in the classroom. For use with the "Board of Education" below.

Robotics

Build a BOE-BOT by adding a chassis, servo motors, power supply, and proximity sensor to your Board of Education (right). Experiments cover basic programming and servo control, sensor interfacing using an infrared LED and receiver, light following, and communication between BOE-BOTS.



- Experience: moderate
- 84 piece kit with book

Requires: BS2 starter kit (P/N 140071EC, see website)

Part No.	Parallax No.	1	10
170131EC	28154	\$119.95	\$109.95

Earth Measurement Kit

Created as a subsequent test to the "What's a Microcontroller?" guide. Topics introduced in this series are closed-loop feedback control systems, serial communications, use of the BASIC Stamp's EEPROM, calibration sensors, conductivity in water and the use of a sound transducer for human feedback.



Part No.	Parallax No.	1	10
202307EC	28153	\$61.95	\$55.79

In-System Programming Kit

This unique development tool programs Scenix SX chips in-system & performs in-circuit source-level debugging. Supports every Scenix Semiconductor chip that is commercially available.



- Includes SX Key software, SX Tech Board, 2 SX 28AC/DP 50 MIPS chips, 1 Murata 50MHz resonator, printed manual, CD ROM, power supply and serial cable
- DB-9 serial connector connects to RS-232 port using serial cable
- 4-pin connector on other side of tool plugs into the SX's Vss, Vdd, OSC1 and OSC2 pins
- Windows[®] 95/98/NT compatible



Part No.	Parallax No.	1	10
176583EC	45180	\$174.95	\$122.49

50MIPS SX Microcontrollers

Part No.	Parallax No.	1	10
162931EC	SX28AC/DP (28-pin DIP pkg)	\$5.49	\$5.25

"Board of Education"

The BOE was designed in coordination with Parallax's educational customers to teach microcontroller programming and interfacing.



- Mechanically interlocked power supply to prevent dual connection of wall-pack and 9-volt battery
- DB9 connector for BS2-IC programming and serial communication during run-time
- P0 - P15 I/O pins, Vdd and Vss connections brought adjacent to 2" x 1-3/8" breadboard area
- Traces on top of the board show connections between BS2-IC and breadboard connections

Includes: Set of ten 10 color-coded 22 gauge wires

Part No.	Parallax No.	1	10
162536EC	28150	\$54.95	\$49.95
202331EC	BS2P40 adapter	24.49	21.95

Line Follower Module

Module comes preassembled and ready to attach to the BOE-BOT (P/N 170131EC) with a simple ribbon cable and male to male header. The module uses a multi-sensor array over which you have complete programmatic control, allowing you to develop line following algorithms that are very simple.



Part No.	Parallax No.	1	10
202340EC	29115	\$57.25	\$51.55

OWI® Robotic Arm Trainer Kit ▲ 109-piece kit**Five Axis of Motion**

Test your motor skills as you build and control the arm. This unit can be commanded or instructed through its five-switch wired controller with lights to grab, release, lift, lower, rotate wrist, and pivot sideways.

- Max. length outwards: 14.2"
- Max. height upwards: 20.1"
- Max. lifting capacity: 4.6 oz.
- Elbow moving range @ 135°
- Wrist rotation clockwise or counter clockwise @ 340°
- Rotates left to right at the base @ 350°
- Grip opens to 2" wide
- Shoulder movement @ 120°
- Weight: 4.5 lbs.

Requires: 4 D batteries (not included)

Part No.	Description	1	10
157366EC	Robotic arm kit (unassembled)	\$74.95	\$67.49
159345EC	Robotic controller software (assembled)	84.95	76.49

Build It Yourself!

Speech Recognition Kit & Speech Interface Kit ▲

Program the words you want the circuit to recognize, connect the interface kit to the main board and interface with the robotic arm through speech. The heart of the speech recognition kit is the HM2007 IC wherein you can program 40 words @ 0.96 seconds word length or 20 words @ 1.92 seconds word length.

208611EC: Can be used independently

Part No.	Description	Pieces	1	10
208611EC	Speech Recognition Kit	42	\$119.95	\$107.95
208629EC	Speech Interface Kit	41	89.95	79.95

Robotic Arm PC Interface Kit ▲ 31-piece kit

With a PC and the software provided, you can program this interface kit for the robotic arm to do a sequence of movements at precise steps or repeat the sequence.

Includes: DB25 male to female cable & software diskette

Part No.	Description	1	10
208637EC	PC Interface Kit	\$69.95	\$62.95

Flex Sensor

- Maximum resistance: 30kΩ to 40kΩ, proportional to the degree of flexing or bending
- Applications: virtual reality data gloves, robotic, bio-metric, physics and engineering

Part No.	Description	Nominal Resistance	1	10	100
150551EC	Flex sensor	10kΩ	\$12.49	\$11.25	\$10.15

8-Pitch Gears and Gear Set

- Works with DC motors with 0.08" shaft diameter
- Heavy-duty plastic construction • Pitch: 0.125"
- 162392EC: 0.15" bore to 0.070" bore
- 131801EC: 20-piece gear set includes 2 each of the following: T10, T20, T30, T40, T50 and 10 bushings

							SALE			Increments of 10		
Part No.	Mfr. Cross Ref. No.	Description	Shaft Bore	O.D.	Press Fit Shaft Dia.	Gear Dia.	1	10	100			
162069EC	T10	10 teeth	0.151"	0.48"	0.156 (5/32)"	0.457"	\$.69	\$.62	\$.59			
162077EC	T20	20 teeth	0.151"	0.875"	0.156 (5/32)"	0.855"	\$.59	\$.44	\$.31			
162085EC	T30	30 teeth	0.151"	1.27"	0.156 (5/32)"	1.239"	\$.69	\$.62	\$.56			
162093EC	T40	40 teeth	0.151"	1.67"	0.156 (5/32)"	1.634"	\$.46	\$.41	\$.37			
162106EC	T50	50 teeth	0.151"	2.07"	0.156 (5/32)"	2.016"	\$.35	\$.30	\$.25			
162392EC	BUSH1	Bushing	0.075"	—	0.078 (5/64)"	0.160"	*	\$.24	\$.22			
Part No.	Mfr. Cross Ref. No.	Description					1	10	50			
131801EC	GA1	Gear set – 20 piece (see description above)								\$7.99	\$7.29	\$6.49

16-Pitch Sprocket Set and Chain

- Operates in high humidity and corrosive environments
- Chain tension load: 2.0 lbs.
- 168276EC: 14-piece sprocket set includes 1 each of the following: 8, 9, 10 teeth at 1/8" bore size; 12, 15, 16, 18, 20, 24, 30, 32, 36, 40 and 48 teeth at 1/4" bore size

Part No.	Mfr. Cross Ref. No.	Description	1	10	25
157075EC	C1227	Drive chain (12" long)	\$9.95	\$8.95	\$7.95
168276EC	8890	Sprocket set - 14 pieces (see description above)	27.95	25.19	22.65

MONDO•TRONICS Flexinol Muscle Wires®

These unique nickel-titanium alloy Muscle Wires® actually shorten in length when electrically powered, and can lift thousands of times their own weight. • Length: 1 meter

How it works... Pressing the switch lets power flow from the batteries through the Muscle Wire®, heating it and causing it to contract and raise the lever and lift the weight. When power is removed, the Muscle Wire® cools and relaxes, and the weight helps it return to its starting position.

141348EC: Muscle Wires® Book & Deluxe Kit

- Kit includes one each Flexinol 100, 150 and 250 Muscle Wires® (below) and Project Book
- 3 meters of wire

Includes: Crimps and instructions

Part No.	Desc.	Linear Wire Dia. (microns)	Typical Resistance (ohm/m)	Deform Current (mA)	Recovery Weight* (grams)	Weight* (grams)	Typical Rate**	Pricing	
								1	10
141321EC	100LT	100	150	180	28	150	33	\$12.95	\$11.69
141874EC	150LT	150	50	400	62	330	20	16.95	15.29
160055EC	375LT	375	8	2750	393	2000	4	19.95	17.95

* Multiply by 0.0098 to get force in Newtons

** Cycles per minute, in still air, at 20° Centigrade

Part No.	Description	1	10
141348EC	Muscle Wires® kit	\$59.95	\$53.95

Obstacle Avoidance Robot Kit ▲ 107-piece kit

Six crank motion legged robot utilizes an infrared light sensing system to find obstacles and maneuvers itself around them. This IR detection kit includes an infrared diode, photo diode, IC, 2 DC motors and all hardware.

Part No.	Description	Dimensions	Wt. (lbs.)	1	10
140821EC	Spider kit	12.0"L x 7.0"W x 3.5"H	1.2	\$59.95	\$53.95

MONDO•TRONICS Electric Pistons™**Deluxe 5 Pack**

The Electric Piston is a shape memory alloy actuator that pulls with up to one pound of force and contracts by 20mm. Typical activation requires one volt at five amps for two seconds. Plus, mount several pistons in parallel for more strength, and in series for longer strokes.

- 1 volt @ 5 amps

Includes: Five pistons, battery, leads and plans for four complete projects

Part No.	Description	1	10
141903EC	Electric piston pack	\$39.95	\$34.95

High-Efficiency Robotic Servo

Excellent power-to-weight ratio for robotic projects.

- Supply voltage: 4.8-6 volts
- Torque: 49 oz.-in. @ 4.8V
- Speed: 16 seconds to 60°
- Size: 0.8"W x 1.4"D x 1.6"H

Part No.	Mfr. Cross Ref.	1	10
157067EC	14500	\$19.95	\$17.95

Giant Robotic Ball-Bearing Servo

Extremely powerful! Perfect for large robotic projects where power is a must.

- Power supply voltage: 4.8-6 volts
- Torque: 161 oz.-in.
- Speed: 19 seconds to 60°

Part No.	Description	1	10
166351EC	Giant robotic servo	\$49.95	\$44.95

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Dual Adjustable Regulated Power Supply Kit

■ 48-piece kit

Build a dual adjustable power supply for your circuits. Outputs positive-negative voltages from ± 5 to ± 15 VDC.

- Adjustable positive and negative supplies ± 5 to ± 15 VDC, 175mA – 750mA per supply • 120VAC input
- LED on indicator • PC board construction

Includes: Components and hardware

Part No.	Mfr. Cross Ref. No.	Dimensions	Wt. (lbs.)	1	10	25
20626EC	JE215	5.1"L x 3.5"W x 2.0"H	2.1 ..	\$22.95	\$20.49	\$18.49

DC Motor Speed Control Kit

■ 35-piece kit

- This kit uses Pulse Width Modulation to vary the speed of a DC motor and maintain torque
- For motors up to 100VDC/5A max.

Requires: 5-16VDC supply (recommend P/N 114825EC, see website)

Part No.	Description	Dimensions	1	10
127829EC	Motor control kit	3.6"L x 2.3"W x 1.2"H	\$19.95	\$17.95

Distance and LED Kits

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Parking Radar Kit ■ 55-piece kit

Parking in tight places can be difficult, but this unit can tell you when you have come within an adjustable preset distance of the object behind you.

- Detection range: 5cm – 1.5m; angle: 5°
- Transmitter frequency: 40kHz
- PCB size: base (4.9"L x 1.9"W) sensor (3.8"L x 1.1"W)

Requires: 10-15VDC @ 16mA max (recommend P/N 100095EC, see website) or auto power plug (recommend P/N 115001EC, see website)

Part No.	Product No.	1	10	25
129120EC	K3502	\$39.95	\$35.99	\$32.39

Ultrasonic Motion Detector Kit ■ 49-piece kit

Detect Motion/movement from 13 to 23 ft. away and trigger an alarm with this kit.

- 2 boards: one with matched pair of ultrasonic transducers to detect motion from 13 to 23 ft. away; 2nd board contains crystal controlled oscillator and all circuits
- Switchable latch, red LED indicator
- Solder pad output to drive external relay or circuits
- Size: main board: 2.8"L x 2.0"W x 0.8"H; transducer board: 2.8"L x 0.6"W x 0.9"H

Requires: 9V battery (recommend P/N 151095EC, pg 65)

Part No.	Description	1	10
125090EC	Ultrasonic alarm kit	\$29.95	\$26.95

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Flashing LED Kit ■ 23-piece kit

Activates 2 flashing LEDs for applications such as model constructions. Adjustable flashing speed by potentiometers.

- 5.5" wire w/ 9V battery connector
- Minimum consumption: 4mA

Requires: 9VDC battery (P/N 151095EC, pg 65)

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10	50
147580EC	MK102	1.3"L x 1.4"W x 0.6"H	0.1 ..	\$7.95	\$7.19	\$6.45

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www.Jameco.com/Kits
LCD Development Kits

Unipolar Stepper Motor Driver Kit

■ 29-piece kit

- Will drive unipolar stepper motors rated up to 6-30VDC @ 1.25A • Onboard 5VDC regulator
- Drives 5, 6 or 8 lead unipolar stepper motors

Part No.	Description	Dimensions	1	10
139109EC	Stepper motor	2.6"L x 1.9"W x 1.0"H	\$29.95	\$26.95

DC to Pulse Width Modulator Kit ■ 40-piece kit

The circuit converts a DC voltage into a series of pulses, such that the pulse duration is directly proportional to the value of the DC voltage.

- PWM range: 0 to 100%
- PWM frequency: 100Hz to 5kHz (adjustable)
- Operating voltage: 8 to 35VDC
- Min. consumption: 35mA
- Max. output current: 6.5A • Efficiency: better than 90% at full load
- Adjustable sensitivity: 2.5 to 35VDC

Part No.	Product No.	Dimensions	Wt. (lbs.)	1	10	25
120539EC	K8004	3.3"L x 1.9"W x 1.8"H	0.5 ..	\$22.95	\$20.49	\$18.95

Test & Measurement Kits

Crossbow

Accelerometers and Interface

141591EC 1-Axis and 141575 3-Axis Accelerometers

- Dynamic range and excellent frequency response
- Acceleration range: $\pm 4g$ • Shielded cable: 2'L pigtail

Requires: 5VDC power supply (recommend P/N 164101EC, pg 27)

141583EC: Digital Accelerometer Interface

- Measures acceleration, impact, tilt, vibration, etc.
- Simple digital interface for 1-axis and 3-axis
- Plugs into any RS-232 port @ 38.4k baud
- 200Hz max. sampling rate

Requires: DB9 male to female cable (recommend P/N 25700EC, pg 56)

Includes: User friendly graphical software and 9VDC @ 500mA power supply

Part No.	Description	Axis	Current	1	10
141591EC	CXL04M1	One	8mA	\$99.95	\$89.95
141575EC	CXL04M3	Three	24mA	249.95	219.95
141583EC	Digital interface card			249.95	224.95

Accelerometer Evaluation Boards

Dual Axis

Evaluation board for the ADXL202, dual axis, 2g accelerometer.

177308EC: features RS-232 interface to connect to PC serial ports. Also includes software to display real time acceleration data.

Part No.	Product No.	Description	1	10
177287EC	ADXL202EB	Dual axis	\$49.95	\$44.95
177308EC	ADXL202EB-232	w/ RS-232	119.95	107.95

PRECISION NAVIGATION, INC.

Vector 2X Compass Module

- 2" accuracy, 1" resolution
- 3-wire serial output format
- Hard iron calibration
- 5Hz sampling rate
- Pin selectable BCD or binary output format

Requires: Power supply 5V @ 10mA (recommend P/N 112070EC, see website)

Part No.	Description	1	10	25
126703EC	Vector 2X module	\$49.95	\$44.95	\$39.95

Function Generator Kit ■ 21-piece kit

Sine, Triangle and Square Wave

Great for prototyping electronic circuits. Produces waveforms at frequencies continuously variable from 1Hz to 100kHz.

Requires: 12VDC supply or ± 6 VDC split supply (recommend P/N 20626EC, top left)

Part No.	Mfr. Cross Ref. No.	Dimensions	1	10	25
20685EC	JE2206	4.1"L x 1.5"W	\$24.95	\$22.95	\$19.95

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Infrared and RF Code Lock Transmitters and Receivers ■ ▲

- Use for car alarms, garage doors, door locks, lighting control, etc.
- Over 8000 selectable codes
- Use several transmitters with one receiver
- Receivers feature relay output (10A change-over or pulse contact)

Requires: Transmitter: 12V battery type V23G; receivers: 12-16VDC @ 100mA (recommend P/N 100095EC, see website)

Specifications:

Transmitter	117647EC	117647EC	134543EC
Transmission	RF	RF	IR
Channels	2-ch	1-ch	1-ch
Range	100'	100'	23'
Experience	expert	expert	novice
Use w/ receiver	173235EC	117655EC	134551EC



117655EC



134543EC

Part No.	Description	Kit Pieces	Wt. (lbs.)	1	10
117647EC	K6706 2-ch transmitter (RF)	29	0.3	\$16.95	\$14.95
173235EC	K6727 2-ch receiver (RF)	75	0.5	\$39.95	\$35.95
117655EC	K6707A 1-ch receiver (RF)	75	0.5	\$29.95	\$26.99
134543EC	K6708 1-ch transmitter (IR)	16	0.3	\$13.95	\$12.49

15-Channel Infrared Transmitter & Receiver ■

- Applications: remote on-off switch, alarms, garage door opener, etc.
 - 15 independent channels
 - Transmitter/receiver range: ±30 meters
- 120555EC Transmitter:** Requires: 9VDC battery. (recommend P/N 151095EC, pg 65)
- 120547EC Receiver:** • Each output can be a change-over or pulse contact switch
- Output: 50VAC @ 500mA max.
 - PCB dimensions: 2.8"L x 5.7"W

Requires: 8-14VDC (recommend P/N 100095EC or 129314EC, see website)

Part No.	Description	Kit Pieces	Weight (lbs.)	1	10
120555EC	K6710 15-channel transmitter	37	0.8	\$64.95	\$58.39
120547EC	K6711 15-channel receiver	76	0.5	\$44.95	\$39.95

Infrared Remote-Control Receiver Modules

- Commonly used in TVs, VCRs, audio equipment, car stereos and home computers that receive signals or data via infrared
- Single unit module which incorporates a PIN diode & a receiving preamplifier IC
- Excellent mechanical strength and electrical stability
- 940nm wavelength • Size: 0.6"L x 0.6"W x 0.5"H



165008EC



176541EC

Part No.	Description	Voltage Input	1	10	100	1000
165008EC	40.0kHz, top view	5VDC @ 5mA	\$2.99	\$2.69	\$2.39	\$1.99
176541EC	56.8kHz, side view	5VDC @ 2mA	1.95	1.59	1.19	.85

IR LED Illuminator Kit ● 41-piece kit

- Improve low-light camcorder and CCD camera images without visible light
- 36 high powered infrared LEDs
- At 24" the beam is approximately 3.5' across

Requires: 12-15VDC power supply (recommend P/N 114825EC, see website)

Part No.	Description	Dimensions	1	10	25
157964EC	IR illuminator kit	2" Dia.	\$16.95	\$15.29	\$13.75



Ideal for CCD Cameras

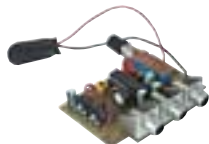
Audio Transmitters, Amplifier and Speech Recognition Kits

FM Stereo Transmitter Mini Kit ■ 37-piece kit

Run your own FM radio station! Plug any stereo signal into this unit and it will be transmitted to any FM radio. Tuneable from 76-108MHz. Plug in a CD player or tape deck and you have a wireless link to an FM radio within 200 feet. Clarity is approximately 40dB stereo separation.

Requires: 9VDC power supply (recommend P/N 151095EC, pg 65)

Part No.	Description	Dimensions	1	10
151239EC	FMST-100 stereo kit	2.7"L x 2.0"W	\$29.95	\$26.95



Universal Mono Pre-Amplifier ■ 17-piece kit

For audio applications with insufficient input signal.

- Output impedance: 1kΩ
- Max. input signal: 40mV
- Frequency range: 20Hz - 20kHz +/-3dB
- Adjustable output level: 40dB max.

Requires: 10/30VDC @ 10mA power supply (recommend P/N 20626EC, pg 68)

Part No.	Product No.	Dimensions	1	10	25
117612EC	K1803	1.2"L x 1.8"W	\$8.95	\$7.95	\$7.25



30-Watt Stereo Power Amplifier ■ 38-piece kit

General purpose stereo amp for audio applications.

- RMS output: dual 15W @ 4Ω or dual 10W @ 8Ω
- Frequency bandwidth: 7Hz to 60kHz (-3dB)
- Separation: 70dB
- Supply voltage: 24VCT @ 2A (recommend P/N 101864EC, pg 24)

Part No.	Product No.	Dimensions	1	10	25
129138EC	K4003	2.8"L x 2.0"W	\$29.95	\$26.95	\$24.49



Super Mini 2.5W Audio Power Amplifier ■ 27-piece kit

This circuit has incredibly tiny dimensions. The IC has a pre-amplifier and power amplifier, which can be used separately by cutting a jumper.

- Operating frequency: 60Hz to 15kHz
- Max. output power: 2.5W (4Ω, 12V)
- Short circuit/thermal overload protection

Requires: 4.5-15VDC @ 400mA pwr. supply (recommend P/N 114825EC, see website)

Part No.	Product No.	Dimensions	1	10	25
127175EC	K2637	1.7"L x 1.3"W x 1.1"H	\$11.95	\$10.69	\$9.65



7-Watt Amplifier Kit ■ 22-piece kit

- Music output power: 7W/4Ω
- RMS output: 3.5W/4Ω & 2W/8Ω
- Harmonic distortion: 0.05% (1W/1kHz)
- Frequency response: 20 to 20kHz (-3dB)
- Short circuit/overload protection

Requires: 15VDC (8-18VDC) @ 500mA power supply (recommend P/N 155803EC, pg 27); speakers

Part No.	Product No.	Dimensions	1	10	25
127255EC	K4001	2.2"L x 1.4"W	\$13.95	\$12.49	\$10.95



Interactive Speech Recognition Kit ■

Voice Direct 364 is a speaker dependent speech recognition module, allowing training of up to 60 words or phrases in slave mode, or 15 words or phrases in stand alone.

Includes: Voice Direct 364 module, Quick setup guide, Microphone element, Speaker (2.25" Dia., 8Ω), 4 microswitches, and a passive component selection to configure the module

Part No.	Description	1	10
173489EC	Speech recognition kit	\$59.95	\$53.95



PAYMENT OPTIONS**Credit Card/Check Cards**

We accept VISA, MasterCard, American Express and Discover. No surcharge. Your account will not be charged until your order is shipped. When ordering, please advise name on card and credit card billing address.

Check or Money Order

You may pay by check or money order in U.S. funds, drawn on a U.S. bank.

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It is easy to open an account with Jameco. Contact us for obtaining open account status.

C.O.D.

Personal checks are accepted. Please add \$7.00 per C.O.D. order. Include the name and address of your bank and your account number.

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All foreign orders must be prepaid with a credit card (see approved credit cards above), wire transfer, traveler's check, cashier's check or money order drawn on a U.S. bank in U.S. funds only. Please do not send cash. Jameco cannot accept letters of credit as a form of payment.

E-mail: international@Jameco.com.

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If for any reason you are not completely satisfied with your purchase, simply return the product, in its original packaging, within 30 days for a refund, credit or exchange. Parts returned due to customer ordering error may be subject to a restock fee. Call our customer service department at 1-800-536-4316 or visit www.Jameco.com to request an RMA#. It should appear clearly on the outside of the box. Returns without an RMA# will not be accepted, and no freight collect packages will be accepted. A completed Jameco customer service form, located on the back of the packing slip, must be included with your return. Books, kits, software, grab bags and special orders are not returnable. Special orders consist of products sold at an OEM quantity discount or products not listed in the Jameco catalog.

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Jameco warrants all merchandise against defects in material or workmanship for a period of 90 days from the original purchase date unless otherwise stated in writing by Jameco. If Jameco receives the product considered to be defective within this warranty period and the product is determined to be defective, Jameco will, at its sole option and discretion, either repair or replace the product. The foregoing is your sole and exclusive remedy and states Jameco's entire liability arising out of this warranty. [However, Jameco will transfer to customer whatever transferable warranties and indemnities Jameco receives from the manufacturer of the products. Any claims arising from such manufacturer's warranties shall be the sole responsibility of the manufacturer and not of Jameco.] Moreover, Jameco's limited warranty is void if the damage or defect has resulted from improper customer assembly, failure by customer to follow instruction, product modification, negligent or improper operation, accident, abuse or misapplication. Products returned to Jameco pursuant to this warranty must be returned to Jameco prepaid.

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The limited warranty above is exclusive and in lieu of all other conditions and warranties for the products and documentation. Jameco makes no other conditions or warranties, express, implied, statutory or otherwise, and expressly disclaims all other conditions and warranties, including but not limited to, implied conditions or warranties of merchantability, fitness for a particular purpose, and non-infringement of the products.

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5 EASY WAYS TO ORDER

Telephone: Toll-Free 24 hours a day!



1-800-455-6119
International orders,
call 1-650-592-8097



Toll-Free

FAX:



US/Canada: 1-800-237-6948
Brazil: 000-817-455-6119
Columbia: 980-9-136748
Indonesia: 1-803-015-237-6948
Mexico: 001-800-593-1449
New Zealand: 080-044-0470
Other Countries: 1-650-592-2503

Online:



<http://www.Jameco.com>
On-line catalog! Our complete offering of over 6,000 products searchable on the Jameco website!

Mail:



E-mail your order to:
sales@Jameco.com or fill out the order form (page 71) and mail it to us.

In-Person:



Visit Jameco at 1355 Shoreway Rd., Belmont, CA. Will-call office hours are 8:00 a.m. - 5:00 p.m.
Monday - Friday

CONTACT INFORMATION

The following services are available at 1-650-592-8097 Monday - Friday from 6:30 a.m. - 5:00 p.m. PST or via e-mail:

- International Sales (international@Jameco.com)
- Customer Service (custservice@Jameco.com)
- Credit Department (credit@Jameco.com)
- Technical Support (tech@Jameco.com)

Toll-Free Hotline!

Please call us at 1-800-455-6119.

A Nuestros Clientes en

La Republica Mexicana: Si usted requiere tratar en Espanol y adquirir nuestros productos facturados L.A.B. Cd. De Mexico (libres de Aduana) y enviados al interior del pais via Estafeta, contacte con nuestro Representante y Distribuidor exclusivo;

Proyeccion Electronica de Mexico, S.A. de

C.V. a: General E-mail: info@proyel.com.

Quote E-mail: sales3@proyel.com

Phone/Fax: 01-(55) 5273-5029

Direccion:

Benjamin Franklin No. 166 Desp. 1
Col. Escandon Deleg. Miguel Hidalgo
C.P. 11800 Mexico, D.F.

Los demas paises de Latinoamerica: Ya pronto tendremos servicio en su Region. Si usted tiene alguna duda o comentario respecto a los servicios de Jameco, contacte con la empresa arriba mencionada en la Ciudad de Mexico, ellos le pueden ayudar.

PRICES

Prices are effective 04-14-03. Prices and discounts are subject to change without notice. We are not responsible for any typographical errors in this catalog. Photos are representative; product appearance may vary.

ONLINE INFORMATION

Get answers to frequently asked questions on the Jameco website at:

<http://www.Jameco.com>

SHIPPING INFORMATION

Guaranteed Delivery Time for UPS Ground (Business Days)

- | | | |
|--------|--------|--------|
| 1 day | 2 days | 3 days |
| 4 days | 5 days | 6 days |

Orders received Mon.-Fri. by 6:00 p.m. Eastern Standard Time will be shipped the same day. Orders received Saturday and Sunday will ship the following Monday (except on holidays). If we are unable to fill your order on the day received, we will send you a gift certificate worth \$5.00 towards your next Jameco purchase. This offer does not apply to orders waiting for credit approval or backordered items.

Options and Rates*

Shipping delivery times are based on working days.

Ground Service

Up to 6 working days for commercial address (up to 9 working days for residential).

Guaranteed delivery times may vary depending on zip code. \$6.50 for 1st 2 lbs.; \$0.74 for each additional lb.

2-Day Air Service

\$12.00 for 1st 2 lbs.; \$1.50 for each additional lb.

Next Day Air Service

- \$21.50 for AM delivery for 1st 2 lbs.; \$1.95 for each additional lb.
- \$16.00 for afternoon delivery for 1st 2 lbs.; \$1.95 for each additional lb.

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\$4.75 for 1st lb.; \$1.90 for each additional lb.

Order must be placed before 5:00 p.m. Eastern Standard Time to ship same day.

Jameco reserves the right to rebill shipping surcharges for customer misaddressed packages

* The above rates apply to single box shipments that are less than 50 lbs. Please call for shipping quote on packages greater than 50 lbs.

International Shipping & Handling

Shipping is via courier or postal service, depending on your preference, insurance availability, and the size and weight of your package. Jameco will apply actual shipping charges with a nominal handling charge on all foreign orders. For mail-in customers, please include 25% for shipping charges or call for a shipping quotation. All returns that meet postal requirements must be sent prepaid via air parcel post. All courier shipments to Canada and Mexico require a certificate of origin. Jameco will provide a certificate of origin for a \$25 processing fee.

POLICIES**Confirming Orders**

Please do not send confirming orders. If company policy necessitates a confirming order, please mark "CONFIRMING" boldly on the first page of the order.

No Minimum Order

A \$5.00 processing fee will be added to orders under \$20.00.

See page 70 for Ordering Information

Fax 1-800-237-6948 Order 24 hours/7 days a week!

Jameco, 1355 Shoreway Road, Belmont, CA 94002 Call: 1-800-455-6119 International TEL: 1-650-592-8097 FAX: 1-650-592-2503

1 Ordered By:

We will ship to this address unless you enter a different ship to address.

Customer No.

VIP No. (see back cover)

Company

Name of Requisitioner

Title

Name of Purchasing Agent

Title

Street Address/PO Box Number

City

State

Zip Code

Contact information (please provide all information and check method preferred)

()

☐ Daytime phone number - Required for Credit Card Orders

()

☐ Fax Number☐ E-mail Address☐ Please check this box if you would not like to receive special offers via e-mail from Jameco.**2** Ship To: (Only required if different)

Company

Name

Title

Street Address/PO Box Number

City

State

Zip Code

3 Method of Payment:☐ Prepaid (check enclosed)☐ C.O.D. (\$7.00 service charge)☐ Net 30 Days (Account must be previously established. Authorized P.O. # required.)

PURCHASE ORDER NO.:

☐ Credit Card

Credit Card users only:



Credit Card Number

Exp. Date: Month

Year

Name on card

Billing Address Street/PO Box

City/State/Zip

4

ITEM NO.	QTY.	PART NUMBER	DATA SHEETS	DESCRIPTION	PAGE NO.	WEIGHT (LBS.)	UNIT PRICE	TOTAL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

5 Please Check Shipping Method Below:

- ☐ Priority Mail (USPS)\$4.75 for 1st lb., \$1.90 for each additional lb.
- ☐ Ground\$6.50 for 1st 2 lbs., \$0.74 for each additional lb.
- ☐ 2 Day Air Service\$12.00 for 1st 2 lbs., \$1.50 for each additional lb.
- ☐ Next Day Air Service (AM delivery)\$21.50 for 1st 2 lbs., \$1.90 for each additional lb.
- ☐ Next Day Air Service (PM delivery)\$16.00 for 1st 2 lbs., \$1.90 for each additional lb.
- ☐ Foreign Shipment via Air Parcel PostShipping approximately 25% of order total. Excess fees will be refunded. Additional shipping methods available

Some restrictions may apply. See order information on page 70 for other shipping methods and conditions of sale.
Shipping rate is based on a single package shipment.

TOTAL WEIGHT

SUB-TOTAL

Add \$5.00 processing fee on orders under \$20

Please Add Applicable Sales Tax (California Only)

Shipping (See Item 5)

C.O.D. (add \$7.00)

Canada and Mexico Certificate of Origin (\$25)

Credit Memo (please attach)

-

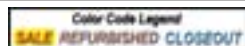
TOTAL

6**JAMECO** thanks you for Your Order!

#

FOR OFFICE USE ONLY

/



Order 24/7 Toll Free 1-800-455-6119

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57-Piece Master Electronics Tool Kit Gets It All Done

Simply every tool you are ever likely to need when working with electronics; with room to spare for parts or special equipment. All in a handsome lockable case.

Kit Includes 1 each:

- 5" & 6" side cutter
- 4.5" bent nose pliers
- 9.5" water pump pliers
- Testing driver
- Utility knife
- IC extractor
- Solder wick
- 6-piece open-end wrench set
- Brush
- 6" stainless scissors
- Inspection mirror
- 30W ceramic soldering iron
- Utility component storage box
- PRO-SOFT duplex color screwdrivers: 4 Phillips screwdrivers (#0 x 75, #1 x 75, #2 x 38, and #2 x 100mm); 4 slotted screwdrivers (3 x 75, 5 x 75, 6 x 38, and 6 x 100mm); 2 nut drivers (5 and 6mm)
- Carrying case has two removable pallets, adjustable compartments, and combination locks
- 5" & 6" long nose pliers
- 8" combination pliers
- 9.5" crimping tool
- Alignment driver
- 6" tweezers
- 10" measuring ruler
- Soldering iron stand
- 6" adjustable wrench
- Flashlight
- Parts tube
- Solder core
- 3-piece soldering aid kit
- Carpenter hammer
- Heat sink
- Oil can
- PVC insulated tape
- 3-prong holder
- 5-piece file set
- Desoldering pump
- 6-piece precision screwdrivers
- 7-piece folding type hex-key wrench



Part No.	Description	Size	Wt. (lbs.)	1	5
218245EC	Master electronic tool kit	18"L x 13"D x 14"H	16.0	\$131.95	\$117.95

27-Piece Techie Tool Kit

All the essential tech tools in a durable canvas carrying case. Just grab it and go!

Kit Includes 1 each:

- 7-piece folding type hex wrench (1.3, 1.5, 2.0, 2.5, 3.0, 4.0, 4.5)
- 5" precision range side cutting pliers
- Mini soldering iron stand with sponge
- Crystal Phillips screwdrivers (#0, #1, #2)
- 7-in-1 crimping tool
- Desoldering pump
- Solder wick
- Tweezers
- IC extractor tool
- Utility knife
- Mini flashlight
- 5.3" precision range long nose pliers
- Crystal slotted screwdrivers (3, 5, 6mm)
- Flat and round needle files
- 30W ceramic soldering iron
- Brush
- Solder core
- Electric tape
- Alignment driver
- Utility components box
- Digital multimeter
- 6" adjustable wrench
- Nut screwdriver (1/4")



Part No.	Description	Case Size	Wt. (lbs.)	1	5
218229EC	Technician's tool kit	16.2"W x 13.0"D x 3.0"H	7.1	\$115.95	\$104.95

25-Piece Repair Tool Kit with Briefcase

This unique two-in-one design allows you to carry a your tools and a briefcase in one handy package. Need just the briefcase? Just zip off the tool case that attaches onto the briefcase with zippers and go!

Kit Includes 1 each:

- 5" diagonal cutting nippers
- 6" combination pliers
- 2-in-1 utility knife (saw and knife)
- 6" adjustable wrench
- Tweezers
- Solder core
- 30W ceramic soldering iron
- 5" snipe nose pliers
- Alignment driver
- IC extractor
- 7-piece folding type hex wrench
- 10" measuring tape
- Desoldering pump
- Crystal line screwdrivers: #0, #1, #2 Phillips; 3, 5, 6mm slotted



Part No.	Description	Case Size	Wt. (lbs.)	1	5
218211EC	Repair kit with zipped briefcase	14.2"W x 11.0"D x 4.7"H	6.6	\$66.95	\$58.95

60-Piece Bit, 1/4" Socket & Driver Kit Covers the Bases

This compact kit contains the most popular bits and 1/4" sockets with a comfortable cushioned, reversible ratchet driver handle.

- Drill bits 1/16", 3/32", 1/8", 5/32", 3/16"
- Socket bits 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm
- Slotted bits 1/8", 5/32", 3/16", 1/4", 9/32"
- Hex bits 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
- Torque bits T-10, T-15, T-20, T-25, T-30, T-40
- Phillips bits #1, #2, #3
- 7.5" Flexible extension
- 2.4" Magnetic bit adapter
- 6" long nose pliers
- Reversible ratchet screwdriver
- Phillips Z bits 1, 2, 3
- Socket adapter
- Square bit 1, 2, 3
- 6" adjustable wrench
- Vinyl zipper case with organizer to find sizes fast



Part No.	Description	Case Size	1	5
218261EC	60-piece bit socket and driver kit	8.5"L x 6.5"W x 2.2"H	\$36.95	\$32.95

28-Piece Tool Kit

- 4" micro cutting pliers
- 5" snipe nose pliers
- 4-piece screwdriver set (M1.7, M2.0, M2.3, M2.6)
- 8-piece PRO-SOFT duplex screw drivers (5mm; 6mm; T5, T6, T8, T10, #1 Phillips, 5 slotted)
- Stainless tweezers
- Solder wick
- Hot air tip
- S-needle tip
- Size: 11.9"L x 9.8"W x 1.9"H
- 6-piece soldering aid kit
- Solder core
- Self igniting micro torch
- 2-piece precision screwdriver



Part No.	Description	1	5
218202EC	28-Piece tool kit	\$66.95	\$59.95

8-Piece Compact Tool Kit

The perfect size for little repairs. Stash it in the drawer for quick repairs.

- 5" side cutter
- 5" long nose pliers
- PRO-SOFT 3 x 75mm slotted screwdriver
- PRO-SOFT #0 x 75mm Phillips screwdriver
- Stainless tweezers
- Desoldering pump
- Portable gas soldering iron with torch tip
- Size: 8.1"L x 5.7"W x 1.4"H
- Solder core



Part No.	Description	1	5
218181EC	8-piece compact tool kit	\$21.95	\$19.95

Data-Vac Electric Duster

This compact, handheld Data-Vac electric duster is far less expensive and better for the environment than canned air. It quickly and easily blows dust, lint and debris off keyboards, computers, printers, disk drives, fax machines, photographic and other high-tech equipment. That helps prevent costly downtime and computer repair.

- 1.73 amps/0.5HP motor
- 25 CFM/10,000FPM
- 12' UL approved power cord
- Attachments: air pin pointer & power air maximizer



Part No.	Product No.	Price
219192EC	ED-3C	\$49.95

Wide View 2X Foldable Magnifier

This folding 2X magnifier is very popular among professionals needing a large view magnifier plus the convenience of portability. Made of high quality plastic, the frame is light with a precision glass lens. An easy-to-read scale in both inches (scale of 1/16") and millimeters are etched on the base.

- Size (unfolded): 6.1"W x 5.3"D x 6.5"H



Part No.	Description	1	10
218296EC	Foldable magnifier	\$9.95	\$8.95

Mini Thermo-Anemometer



Foldable housing extends for better reach



Waterproof, pocket size with air velocity, temperature and windchill all in one. Ideal for checking blowers, fans, exhaust hoods and balancing AC/HT ducts.

- Foldable protective housing extends to 9" for better reach
- Measures temperature and windchill from 0°F to 122°F (-18°C to 50°C)
- Measures wind speed in ft/min, MPH, m/s, km/h, knots and Beaufort force
- Large dual display for air velocity and temperature
- Auto shutoff 20 minutes after last key is pressed
- Water resistant housing floats and drop tested to 6'

Includes: CR2032 lithium battery and lanyard

Part No.	Description	1	5
218085EC	Thermo-anemometer	\$88.95	\$84.49

Waterproof Thermometer



- 2.75" stainless steel stem
- Digital display of 0.1° resolution
- °C/°F switchable ranges -40°F to 392°F (-40°C to 200°C)
- MAX/MIN recall of high and low temperature
- HOLD and AUTO-OFF

Includes: LR44 button battery and protective cover

Part No.	Description	Size	Weight (lbs.)	1	5
218077EC	Waterproof thermometer	5.9"L x 0.8"W x 0.7"T	0.10	\$18.95	\$17.95



Waterproof housing allows thermometer to be completely submerged in water



2dB Sound Level Meter

Helps insure compliance with OSHA and community sound ordinances. Also perfect for the design of quieter equipment and with sound system installations.

- High & low measuring ranges: High: 75 to 130dB; Low: 35 to 90dB w/ 0.1dB res.
- Meets ANSI and IEC 651 Type II standards
- Fast/slow response; max. hold with reset button
- Utilizes a 0.49" condenser microphone
- Size: 9.5"L x 2.7"W x 1.0"T
- A and C weighting
- Large: 05", 3 1/2-digit display
- Built in calibration check

Includes: Hard vinyl case and 9V battery

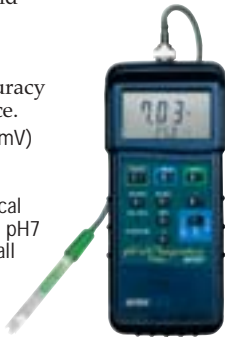
Part No.	Description	Weight (lbs.)	1	5
218114EC	Digital decibel sound meter	0.5	\$248.95	\$236.49



Heavy Duty pH/mV Temperature Meter

This ideal meter for field measurement of pH, millivolts and temperature with laboratory-quality accuracy at a very attractive price.

- Dual display for (pH or mV) and temperature
- Degrees C/F switchable
- Easy 2-point slope and cal adjustments at pH4 and pH7
- Min/max & average recall
- Super-large LCD with contrast adjust
- Auto shut-off and data hold
- Low battery indicator
- Manual and auto temperature compensation using temp probe
- Size: 7.0"L x 2.9"W x 1.3"Thick
- Weight: 0.8 lbs.



Part No.	Description	1	5
28157EC	Heavy duty meter	\$168.95	\$159.95
218131EC	Tripak buffers for calibration	24.95	23.69
218149EC	Vinyl carrying case	9.95	9.49

6-Outlet Surge Protector



- Standard 6-outlet surge suppressor
- Heavy-duty power cord (14AWG x 3)
- RESET/OFF switch with built-in 15A circuit breaker
- Clamping voltage: 400V
- Maximum surge dissipation: 900 joules
- Maximum surge voltage: 6500V
- Maximum spike current: 4500A
- Weight: 0.9 lbs.

Part No.	Description	1	10	100
216485EC	Surge suppressor ...	\$6.95	\$6.25	\$5.59

Insulation Piercing Test Clips with Banana Jack

Makes contact with insulated wires without cutting or stripping insulation. Spring-loaded double V clamp holds wire centered for piercing. Pierces insulation on wires from 22 to 14 AWG (0.030" through 0.180" diameter).



Part No.	Product No.	1	10	25
217453EC	6405	\$29.95	\$27.95	\$25.49

Outdoor Security Floodlight Uses No Electricity!

Dark spots around your house or neighborhood are vulnerable to vandalism and burglary. Protect yourself and your property with our new solar outdoor security lights. This motion-activated solar outdoor security light protects and saves on electricity too! Use simple tools to mount the unit to a wall. No complicated wiring or electrician needed. The built-in batteries are rechargeable by sunlight, so if the main power goes out you still have security light. The solar panel, which has a 12-foot cord, can be positioned for optimum light exposure.

- Lights up to 60 times on a single charge
- Charges by day, lights by night
- Comes complete with built-in motion detector, rechargeable battery and bright halogen light
- Easy to install
- Weight: 7.1 lbs.



Part No.	Description	1	10
219580EC	Solar security floodlight	\$79.95	\$74.95

Weller® Analog Soldering Station

- Innovative heater and sensor combination for quick heat-up and rapid temperature recovery
- Tip temperature offset capability which allows user to reset temperature readings to match tip size and style
- Wireless temperature lockout
- Auto power down after 90 minutes of inactivity
- Temperature range: 350°F to 850°F (177°C – 454°C)
- Temp. accuracy: ±90°F (±5°C)
- Size: 5.9"L x 4.5"W x 3.6"H
- Weight: 4.0 lbs.
- ESD safe

Part No.	Product No.	Description	Wt. (lbs.)	1	10
217461EC	WES51	Analog soldering station	4.0	\$115.95	\$105.95



NiMH Battery Charger

Charge your AA or AAA NiMH batteries with this 8-hour battery charger. Simply plug into a wall outlet. Red LED indicates charging and green LED indicates ready to use.

- Charging bay allow 4AA or 4AAA batteries to be charged at the same time
- Output: 4AA 1.35V @ 250mA or 4AAA 1.35V @ 95mA
- Size: 2.8"W x 2.4"D x 4.6"H
- Weight: 1.0 lb.

Part No.	Description	1	10
217533EC	Plug-in battery charger	\$7.95	\$6.95



Popular & Out-of-Production Electronic Products 24/7 Service, Expert Support & Low-Price Guarantee

Now Use Jameco @ Home Too!

Over the past month or so, we haven't been able to resist some of the great products for home use we've come across. Inside this catalog you'll find everything you've always counted on from Jameco, plus many new products for your home.

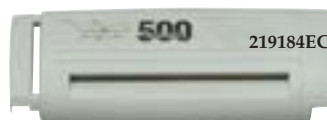
From the outrageously low-priced shredders shown at right, to the never-fail emergency radio on page 5, you'll find the same commitment to product quality, and fast and friendly service we love bringing to you everyday. Take a look and you'll agree.

Find Out What's Bugging You

Electromagnetic radiation is all around us, some of it not so friendly; but until now there's never been an easier, more portable device to detect and measure it. Whether you're concerned about your kid's playground near the power station, the laboratory, microwave oven emissions, or searching for clandestine surveillance devices; the ZAP Checker can give you a new measure of peace of mind. Its portability and multiple settings allow you to search out EMR whenever and wherever you want, from your home or office environments to hotel suites and conference rooms. Find out once and for all with the ZAP Checker.



217808EC Zap Checker Radiation Monitor \$129.95



Strip-Cut



Confetti-Cut

At \$9.95 You Can Afford to Test It On A Couple of Twenties

We've all wanted a shredder from time to time, but at these prices it's just too hard to pass up. For a ten spot you can protect yourself from prying eyes and "dumpster divers" with a personal shredder. The Fellowes strip-cut paper shredder (219184EC) is designed to go anywhere you need it, shredding sensitive documents into "unreadable strips." Auto-start/stop means you can feed in up to 7 sheets at a time (staples, paper clips and all!) with one-handed ease; no fumbling for a switch. And at this unbelievable price, you can turn every basket in your home and office into a maximum security receptacle.

For an added measure of destruction of top-secret materials, use the Fellowes factory refurbished confetti-cut shredder (219176EC). Originally new at \$129, it is an equally-great value now at \$49.95. It features faster throughput, greater capacity and a confetti-cut to make your discarded documents disappear, and disappear for good.

To keep prying eyes from poaching your private business, either model will turn that stack of confidential paperwork into a handful of scrambled dregs with shredded ease.

219184EC Fellowes Brand-New 7 pg. "Strip Cut" Shredder \$9.95

219176EC Factory Refurbed 12 pg. "Confetti Cut" Shredder \$49.95

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